Exploring Practical Wisdom in the Workplace

By

Dayana Kupisk

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Human Development and Family Studies)

at the

UNIVERSITY OF WISCONSIN – MADISON

2019

Date of final oral examination: May 3, 2019

The dissertation is approved by the following members of the Final Oral Committee: Stephen A. Small, Professor Emeritus, Human Development and Family Studies Janean Dilworth-Bart, Associate Professor, Human Development and Family Studies Larissa Duncan, Associate Professor, Human Development and Family Studies Christine B. Whelan, Clinical Professor, Consumer Science Robert D. Enright, Full Professor, Educational Psychology

© Copyright by Dayana Kupisk 2019 All Rights Reserved

Abstract

Practical wisdom is considered a uniquely human, virtuous, and multidimensional quality that promotes optimal judgment in times of uncertainty or complexity. Despite centuries of philosophical discourse on the topic, empirical research remains limited in understanding the contributors to wise action, as well as its emergence in applied settings. The present studies seek to fill these gaps by exploring practical wisdom in the workplace. Study 1 investigates how selfcontrol, socioemotional intelligence, and character strengths contribute to practical wisdom among employees in a corporate setting (N = 172). Results suggest that all three factors are related to practical wisdom among employees, although differentially. While self-control, love, curiosity, and fairness all significantly and positively related to practical wisdom, a negative relationship was observed between practical wisdom and socioemotional intelligence. Follow-up analyses explore possible alternatives for capturing virtuous qualities of practical wisdom. Study 2 extends this inquiry by exploring differences in individual capacity for utilizing practical wisdom in real time through qualitative analysis of interviews with employees describing their response to a dilemma they experienced in the workplace. From commonly discussed themes, the PARTS Model of practical wisdom is introduced to highlight strategies utilized in response to these challenges. These strategies include pragmatics of life, affect regulation, reflective practice, tolerance for ambiguity, and systems thinking. The presence of these strategies is examined between subgroups reflecting either high (n = 12) or low scores (n = 12) on a selfreport measure of practical wisdom. The findings are discussed in terms of their implications for organizational promotion of practical wisdom within the workplace.

Keywords: practical wisdom, workplace, employees, self-control, socioemotional intelligence, character strengths, decision-making

Acknowledgements

To my advisor and mentor, Steve Small, I hold the deepest gratitude, as this project would not have been possible without your guidance. You continue to balance challenging and encouraging me in a way that supports my growth as a thinker, researcher and writer. Importantly, you taught me that it is okay to wear wizard hats sometimes, and that is one nugget of wisdom, among many, I will carry with me in all my endeavors.

To my committee members, Janean Dilworth-Bart, Larissa Duncan, Christine Whelan, and Bob Enright, the inquisitive dialogue and thoughtful feedback you have all provided throughout this process has added immeasurable richness to my research.

Christine, you have set an example of what it means to be purposeful and bold in crafting the life you desire, all while supporting others in doing the same. I hope to pay it forward to future leaders, as well.

This project would not have been possible without the interest and support of the organization where data was collected. The willingness, openness, and authenticity with which employees supported this research is a testament to the mindful and prosocial culture you have cultivated.

I would additionally like to thank the HDFS Department for being a space where I could grow and learn as an applied scholar. From my very first visit, I felt an overwhelming sense of home in an academic department that values the human condition, and prioritizes, both in spirit and practice, a dedication to improving individual and collective well-being. I look forward to carrying a commitment to these efforts into my future work as a graduate of SOHE.

To my family, I have been able to pursue my dreams directly because of your love, support, sacrifice, and frozen home cooked meals. Isaac, Lisa, Eduard, and Galina, as my grandparents you planted the earliest seeds of curiosity, sharing with me your lives from a world very different than my own through storytelling, poetry, and very delicious food. To Eduard, especially, you are the epitome of a life long learner. Like you, I hope to always find joy and wonder in the world.

To my mom and dad, Ilona and Gregory, you are my biggest champions. I am so grateful for the many ways you have supported and encouraged me. Mom, you have lead by example in the way you care for others, respect yourself, strive for perfection, continuously succeed in new ways, and do it all in style. Dad, thank you for passing down the ability and desire to put my thoughts down on paper in a meaningful way.

Michael, seeing the enthusiasm and unwavering dedication with which you pursue your own craft has given me permission to also dream big, and commit to those dreams, because that is in itself a worthy pursuit. Also, I am thankful for L.A. traffic, as it has afforded us many hours of phone conversations to build our brother-sister bond.

To my tribe, my chosen family, my work would not be worthwhile without you by my side. Lauren, Emily H., and Carolyn, you understand as perhaps few others in my life can, the experience of graduate school. Thank you for being there to laugh, celebrate, and encourage. You are the very best friends to drink and know things with. Megan M., you bring laughter and fun to every experience, and the quality second in importance to that is how nice you are. Anne H., you make others better just by being in their orbit. I owe you a very important plane ticket.

For those I have not listed specifically, and there are many, I hope I have communicated my gratitude to you as well.

Table of Contents
Chapter 1: Introduction1
References6
Chapter 2: Study 1 - Exploring Skill and Will in the Context of Practical Wisdom10
Methods15
Procedure15
Sample16
Measures17
Data Analysis Plan21
Results
Descriptive Analysis and Variable Distribution
Bivariate Analyses
Multiple Regression Analyses24
Follow-Up Analyses26
Discussion
Limitations
Future Research and Application
Conclusion
References43
Chapter 3: Study 2 – Using Practical Wisdom to Respond to Workplace Dilemmas50
Methods53
Procedure
Sample54
Measures

Data Analysis Plan	
Results	57
Coding	57
Analysis	
The PARTS Model of Practical Wisdom	77
Discussion	
Contextualizing the PARTS Model	83
Limitations	
Future Research and Application	97
Conclusion	
References	100
Chapter 4: Conclusion	109
References	113
APPENDIX A: Recruitment Flyer	116
APPENDIX B: Digital Informed Consent Form	117
APPENDIX C: Demographics Survey	119
APPENDIX D: Marlow-Crowne Social Desirability Scale (MC-1)	120
APPENDIX E: The San Diego Wisdom Scale (SD-WISE)	121
APPENDIX F: The Brief Self-Control Scale (BSCS)	122
APPENDIX G: Reading the Mind's Eye Test (The Eyes Test)	123
APPENDIX H: The Santa Clara Brief Compassion Scale (SCBCS)	124
APPENDIX I: Interview Consent Form	125
APPENDIX J: Event Reconstruction	127

APPENDIX K: Wisdom Incident Solving Experience (WISE)	129
APPENDIX L: Dimensions of Practical Wisdom Coding Rubric	130

Chapter 1

Introduction

For centuries, philosophers have revered practical wisdom as an optimal, desirable and uniquely human quality that contributes to a more balanced, just life. (Ardelt, 2011; Baltes & Staudinger, 2000; Hall, 2010; Jeste et al., 2010; Kunzmann, 2004). Our modern world frequently presents situations demanding complex, flexible reasoning that can benefit from practical wisdom. As a result, social scientists are increasingly recognizing the need to better understand the mechanisms supportive of practical wisdom across contexts. The present series of studies seeks to understand how practical wisdom emerges in a corporate organizational context, particularly in relation to individual character strengths.

Early exploration into wisdom focused on describing and understanding how exceptional individuals acted in times of uncertainty or great conflict, essentially searching for the hallmarks of wisdom (Clayton & Birren, 1980; Glück & Bluck, 2011; Sternberg, 1998). These implicit approaches for understanding wisdom yielded several individual qualities thought to contribute to wisdom in action: wise individuals are often heralded for their ability to be reflective, provide counsel, draw on intuition and intelligence, and show compassion (Clayton & Birren, 1980; Tiberius & Swartwood, 2011). Similarly, wise *acts* tend to be virtuous, selfless, intentional and balanced (Oser, Schenker & Spychiger, 1999). In support of this, Westrate, Ferrari and Ardelt (2016) found that a majority of spontaneous depictions of wise exemplars aligned most often with practical, judicious individuals who sought to improve the lives of a greatest majority through honest and purposeful aims. These findings helped shape current conceptualizations of practical wisdom, which generally focus on the reflective, prosocial, and complex nature of wise action (Grossmann, Brienza & Bobocel, 2017; Staudinger, 2008; Schwartz & Sharpe, 2006).

By noting that individuals most often considered wise were the same ones described as responding fairly, compassionately, rationally, and creatively in times of ambiguity or uncertainty, scientists moved closer to understanding what behaviors ought to be explored further in order to understand practical wisdom. However, not all problems require practical wisdom. For example, losing a job, albeit extremely stressful, often calls for concrete actions such as finalizing your current projects, updating your resume, and submitting applications for new jobs. But if you work for a grant-funded organization whose money is suddenly pulled without explanation, resulting in either you or your close friend facing a lay off, the nuances of emotions and challenges is beyond simply losing a job. Do you look for answers from the funding agency? Do you blame your supervisor for a lack of transparency or work with them to seek other funding solutions? Do you support your friend through the emotional time or focus on your own needs and plans? The ways in which an individual responds to or handles such a situation is markedly different based on their perspectives and goals, the unique circumstances of the situation, and the relationships they have with involved others. Thus, a broad definition for practical wisdom encapsulates both the ability to respond to complex dilemmas that do not have clear, simple solutions, and also the capacity to do so in ways that are situation-specific and lead to long-term positive outcomes (Baltes & Staudinger, 2000; Sternberg, 2004).

These general conceptualizations serve as a springboard for understanding what wisdom looks like in practice. There are distinct fields uniquely characterized by complexity that lend themselves well to the exploration of wisdom. For example, nursing, parenting, and youth practice, all describe roles where individuals are required to consider the needs of others, but also where their own capacities and beliefs may be relevant when responding to dilemmas (Benner, 2000; Small & Metler, in press; Small & Kupisk, 2015). Individuals in these kinds of roles are often faced with unanticipated problems or situations that evolve with time as new information becomes known or circumstances change (Small & Kupisk, 2015). It is in these types of dynamic roles that practical wisdom is particularly useful for effectively tackling challenges.

Contemporary researchers have noted several strategies relevant to the expression of wisdom in times of uncertainty, such as taking the perspectives of others, setting clear, attainable and meaningful goals, and drawing from multiple types of knowledge (Ardelt, 2004; Kupisk, 2016). While these strategies shed light on how wisdom unfolds in real time, there are likely individual psychosocial capacities and character strengths that increase the likelihood for wise action to emerge. Indeed, character strengths, which refer to personal qualities supporting individuals in seeking out valued goals, are considered integral for taking moral action (Park, Peterson & Seligman, 2004; Park & Peterson, 2009). The application of character strengths thus underscores the difference between simply possessing an ability and the intentional desire to use that skill in a meaningful way. For example, perspective taking is considered central to practical wisdom, and research shows that reasoning in the third person is one way to promote wise problem solving (Grossmann et al., 2017; Kupisk, 2016). However, this approach to reasoning also likely requires a capacity for empathy and compassion in order to understand others. In this way, wisdom is a multifaceted quality, supported by behavioral, cognitive, and affective capacities (Ardelt, 2004; Staudinger & Glück, 2011).

Schwartz (2011) considered the balance of these elements to reflect both *skill* and *will*. Skills enable individuals to carry out behaviors effectively, while a will that is guided by positive values is necessary to pursue moral, desirable outcomes characteristic of wise action. Practical wisdom is not simply problem solving about every day issues. Rather, it refers to an ability to pursue the *right* solution at the *right* time, demanding that individuals be responsive, flexible, and creative in their approaches to dealing with difficult situations (Schwartz & Sharpe, 2010). An individual may be able to set a concrete, achievable goal for resolving a dilemma, but if they are unable or unwilling to perceive others' needs, control their own emotions, or are guided by selfish desires, their approach may be far from wise.

One area of practical wisdom research that remains limited is the organizational context. There is a breadth of literature on dynamic or transformative leadership as a mechanism for promoting organizational success, but much less is known about how individuals at all levels of an organization deal with common challenges that arise (McKenna, Rooney, Boal, 2009; Nonaka & Takeuchi, 2011). Workplaces increasingly require collaboration, and many individuals must figure out how to best balance flexible schedules, novel work environments, and highly diverse social climates, all of which add complexity to navigating daily challenges (Prewitt, 2002). Within an organizational context, employees who are able to effectively tackle common dilemmas may, in turn, feel more competent and engaged, while simultaneously promoting a positive environment overall. In a time when organizations are becoming more complex and employees are demanding that the workplace be more socially responsible and value-driven, the need for practical wisdom is especially relevant (Ben-Hur & Jonsen, 2012; Gibson, 2007; Hurst, 2013; Snowden & Boone, 2007; Yang, 2011).

The current literature on practical wisdom has provided a breadth of information on how to conceptualize wisdom, but little research exists on how practical wisdom unfolds in real time. Current gaps in the study of practical wisdom include understanding how individual psychosocial capacities and character strengths contribute to a person's readiness to reason wisely, as well as how practical wisdom manifests across distinct contexts (e.g., parent-child relationships, workplaces). Understanding these elements of practical wisdom can inform the ways in which individuals apply or develop practical wisdom in their own lives. The present series of studies seek to fill these gaps by exploring practical wisdom in the workplace. The first study investigates how self-control, socioemotional intelligence, and character strengths contribute to practical wisdom among employees in a corporate setting. The second study will extend these findings by examining how employees within the corporate setting respond to complex challenges in situ, as well as how these strategies align with current understandings of practical wisdom.

References

- Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, 47(5), 257–285. doi: 10.1159/000079154
- Ardelt, M. (2011). Wisdom, age, and well-being. In K. W. Schaie & S.L. Willis (Eds.), *Handbook of the Psychology of Aging* (pp. 279-291). London, UK: Elsevier. doi:10.1016/ 8978-0-12-380882-0.00018-8
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *The American Psychologist*, 55(1), 122–136. doi: 10.1037/0003-066X.55.1.122
- Ben-hur, S., & Jonsen, K. (2012). Ethical leadership: Lessons from moses. Journal of Mangement Development, 31(9), 962-73. doi: 10.1108/02621711211259901
- Benner, P. (2000). The wisdom of our practice. *The American Jounral of Nursing*, *100*(10), 99–104.
- Clayton, V. P., & Birren, J. E. (1980). The development of wisdom across the life-span: A reexamination of an ancient topic. In P.B. Baltes & O.G. Brim (Eds.), *Life-span development and behavior*. New York, NY: Academic.
- Gibson, P. S. (2007). Developing practical management wisdom. *Journal of Management Development*, 27(5), 528-36. doi: 10.1108/02621710810871835
- Glück, J., & Bluck, S. (2011). Laypeople's conceptions of wisdom and its development: Cognitive and integrative views. *Psychological Sciences*, 66 B(3), 321–324. doi:10.1093/ geronb/gbr011

Grossmann, I., Brienza, J. P., & Bobocel, D. R. (2017). Wise deliberation sustains cooperation.

Nature Human Behavior, 0061(1), 1-6. doi: 10.1038/s41562-017-0061

Hall, S. S. (2010). Wisdom: From philosophy to neuroscience. New York, NY: Alfred A. Knopf.

- Hurst, D. K. (2013). Practical wisdom: Reinventing organizations by rediscovering ourselves. *Management Research Review*, *36*(8), 759-66. doi: 10.1108/MRR-11-2012-0256
- Jeste, D. V., Ardelt, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert Consensus on Characteristics of Wisdom: A Delphi Method Study. *The Gerontologist*, 50(5), 668–680. doi; 10.1093/geront/gnq022
- Kunzmann, A. (2004). Approaches to a good life: The emotional–motivational side to wisdom. *Positive Psychology in Practice*, *31*, 504–517.
- Kupisk, D. (2016). The role of practical wisdom in youth practice. Unpublished master's thesis,The University of Wisconsin-Madison, Madison, Wisconsin.
- McKenna, B., Rooney, D., & Boal, K. B. (2009). Wisdom principles as a meta-theoretical basis for evaluating leadership. *The Leadership Quarterly*, 20, 177-90. doi: 10.1016/j.leaqua. 2009.01.013
- Nonaka, I., & Takeuchi, H. (2011, May). The wise leader: How CEOs can learn practical wisdom to help them do what's right for their companies- and society. *The Harvard Business Review*, 58-67.
- Oser, F. K., Schenker, C., & Spychiger, M. (1999). Wisdom: An action-oriented approach. In K.H. Reich, F.K. Oser, & W.G. Scarlett (Eds.), *Psychological Studies on spiritual and religious development*. Pabst: Leugerich.
- Park, N., & Peterson, C. (2009). Character strengths: Research and Practice. Journal of College and Character, 4, 1-10. doi: 10.2202/1940-1639.1042

Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being.

Journal of Social and Clinical Psychology, *23*(5), 603-19. doi: 10.1521/jscp.23.5.603. 50748

- Prewitt, V. R. (2002). Wisdom in the workplace. *Performance Improvement Quarterly*, 15(1), 84-98.
- Schwartz, B. (2011). Practical wisdom and organizations. *Research in Organizational Behavior*, *31*, 3-23. doi: 10.1016/j.riob.2011.09.001
- Schwartz, B., & Sharpe, K.E. (2006). Practical wisdom: Aristotle meets positive psychology. Journal of Happiness Studies, 7, 377-95. doi:10.1007/s10902-005-3651-y
- Schwartz, B., & Sharpe, K.E. (2010). *Practical wisdom: The right way to do the right thing*. New York, NY: Riverhead Books.
- Small, S. A., & Metler. D. C. (in press). How mothers approach difficult parenting problems: Making the case for wisdom in childrearing. *Family Relations*.
- Small, S. A., & Kupisk, D. (2015). Wisdom in practice. In M. Walcheski and J. Rienke (Eds.), *Family Life Education: The Practice of Family Science* (3rd ed., pp.17-26). Minneapolis: National Council on Family Relations.
- Snowden, D. F., & Boone, M. E. (2007, November). A leader's framework for decision making:Wise executives tailor their approach to fit the complexity of the circumstances they face.*Harvard Business Review*, 68-76.
- Staudinger, U. M. (2008). A Psychology of Wisdom: History and Recent Developments. *Research in Human Development*, 5(2), 107–120. doi: 10.1080/15427600802034835
- Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research: commonalities and differences in a growing field. *Annual Review of Psychology*, 62, 215–241. doi:10.1146/ annurev.psych.121208.131659

- Sternberg, R. J. (2004). What is wisdom and how can we develop It? Annals of the American Academy of Political and Social Science, 591(1), 164–74. doi:10.1177/0002716203 260097
- Sternberg, R. J. (1998). A balance theory of wisdom. *Review of General Psychology*, 2(4), 347–65. doi: 10.1037/1089-2680.2.4.347
- Tiberius, V., & Swartwood, J. (2011). Wisdom revisited: A case study in normative theorizing. *Philosophical Explorations*, *14*(3), 277–295. doi:10.1080/13869795.2011.594961
- Weststrate, N. M., Ferrari, M., & Ardelt, M. (2016). The Many Faces of Wisdom: An Investigation of Cultural-Historical Wisdom Exemplars Reveals Practical, Philosophical, and Benevolent Prototypes. *Personality and Social Psychology Bulletin*, 42(5), 662–676. doi:10.1177/0146167216638075
- Yang, S. (2011). Wisdom displayed through leadership: Exploring leadership-related wisdom. *The Leadership Quarterly*, 22, 616-32. doi: 10.1016/j.leaqua.2011.05.004

Chapter 2

Study 1: Exploring Skill and Will in the Context of Practical Wisdom

Contemporary research on practical wisdom has largely focused on understanding how to define and conceptualize wisdom, often converging on a multidimensional, desirable quality that allows individuals to seek optimal, reasoned, and prosocial solutions to complex dilemmas (Baltes & Staudinger, 2000; Schwartz & Sharpe, 2006). More recently, scientists have shifted their focus towards understanding specific strategies utilized by individuals to make wise decisions in times of uncertainty or ambiguity (Baltes & Staudinger, 2000; Grossmann, 2017; Small & Kupisk, 2015). Several components of practical wisdom have been identified, including reasoning in the third person, considering multiple perspectives and setting value-driven goals (Grossmann, Brieza, Bobocel, 2017; Kupisk, 2016; Schwartz, 2011). However, many of these behaviors are not simply learned skills, but abilities that are likely built upon particular cognitive, socio-emotional and moral capacities.

For example, one central component to practical wisdom is the pursuit of goals that support a greater good (Bassett, 2005; Sternberg, 2004). Seeking such ends requires intentional and holistic objectives, as opposed to reactionary or simple solutions (Kupisk, 2016; Schwartz, 2011). It also likely requires a capacity for empathy or compassion necessary for concerning oneself with the well-being of others, as well as a cognitive capacity to reason through how one's responses may differentially impact others. In light of this, it may be more accurate to view practical wisdom as a higher order process that results from several complimentary skills and character strengths working together to create a sum greater than its parts (Bangen, Meeks & Jeste, 2013; Thomas, Bangen, Ardelt & Jeste, 2017). Current research is beginning to support this notion with new findings indicating the role of cognitive, affective, and behavioral qualities as necessary components of practical wisdom (Ardelt, 2008; Bassett, 2011; Jeste et al., 2010; Schmit, Muldoon & Pounders, 2012; Sharma & Dewangan, 2017).

Research on the qualities contributing to how practical wisdom unfolds in real-time remains limited. Practical wisdom is defined here as an ability to take thoughtful, intentional and ethical action in response to important, difficult, or uncertain situations (Bangen et al., 2013; Bassett, 2005; Kupisk, 2016; Small & Kupisk, 2015; Sternberg, 2004). While there are likely several traits that contribute to this end, the definition itself underscores both the need for skills to take action as well as the will to do so in a moral way (Schwartz & Sharpe, 2010). Individuals utilizing practical wisdom seek solutions that require significant thought and attention, and must do so in accordance with values that take into account the impact on others (e.g., as opposed to acting purely in self-interest; Schwartz, 2011). The former requires self-control, an ability to regulate behavior such that a person can pursue goals effectively. The latter demands the use of positive character strengths, conceptualized as the underlying and defining mechanisms for informing virtuosity, such as humility, honesty, and kindness, which in turn can guide behavior towards a greater good (Peterson & Seligman, 2004).

In addition to regulating one's own behaviors and emotions, practical wisdom emphasizes the relational aspects of complex dilemmas. That is, to act wisely one must consider the varying needs, perspectives, and preexisting relationships of individuals involved with or impacted by a presenting dilemma (Ardelt & Oh, 2016; Bangen et al., 2013; Kupisk, 2016; Sternberg, 1998). Given this, an important counterpart to exhibiting self-control may be mastery over one's emotions and relationships as reflected in socio-emotional intelligence. This refers to the ability to express emotion, appraise and regulate the emotions of self and others, and utilize this emotional knowledge for solving problems (Mayer, Roberts & Barsade, 2008; Schutte, Malouff & Bhullar, 2009). For example, considering others' perspectives when faced with a dilemma may require understanding the emotions of those involved (socioemotional intelligence), as well as active listening and patience (self-control). Moreover, contrary to common notions that emotional reasoning is maladaptive, some studies find that when utilized effectively, heightened emotions can actually promote better decision-making (Seo & Barrett, 2007; Valdesolo & DeSteno, 2006). Together, these elements of regulation may influence the capacity for practical wisdom and affect how individuals think about and respond to complex dilemmas.

Such behavioral and emotional capacities, however, would be limited if not supported by character strengths that allow for individuals to align their values with the ways in which they interact with the world (Park, Peterson & Seligman, 2004). Character strengths, such as honesty or love, refer to positively and socially valued traits of individuals (Peterson & Seligman, 2004). All people are thought to possess common character strengths to varying degrees, with some more central to an individual's personality (Peterson & Seligman, 2004). Given that practical wisdom is considered morally virtuous and involves seeking goals that support a greater good, it is expected that some character strengths may lend themselves more directly to wise action. For example, in a study of youth practitioners, those who displayed the greatest degree of practical wisdom in solving complex work dilemmas also expressed a high degree of compassion, humility, and comfort with ambiguity (Kupisk, 2016). Other studies have noted the importance of humor, creativity, and love of learning/openness in promoting practical wisdom (Ardelt, 2008; Avey, Luthans, Hannah, Sweetman & Peterson, 2012; Bangen et al., 2013; Kramer, 2000; Webster, 2007).

Conceptually, one's embodiment of particular character strengths may be a catalyst for the effective utilization of regulatory behaviors necessary to pursue and implement wise action in times of uncertainty. Character strengths are consistently associated with psychological wellbeing, as well as success across contexts including the workplace and school (Gander, Proyer, Ruch & Wyss, 2012; Wagner & Ruch, 2015). Moreover, Corral-Verdugo, Tapia-Fonllem and Ortiz-Valdez (2015) note that some character strengths are particularly salient for promoting sustainable behavior, defined as positive acts that individuals pursue in order to nourish their social and physical environments. Similarly, the inverse may be true; even though individuals who are strongly guided by their values are able to override poor decision-making in times of depleted self-control, this association does not hold true for individuals high in power. This suggests that the self-serving quality of power may mitigate the role of values in promoting positive prosocial behaviors (Joosten, Dijke, Hiel & Cremer, 2015). Together, these findings contribute to a growing recognition that character strengths can serve as a moral guide in times of challenge, but also, by extension, as a potential mechanism for promoting productivity and economic gains when utilized as a tool to promote employee well-being and agency in workrelated contexts (Peterson & Park, 2006).

Of the 24 character strengths identified by Peterson and Seligman (2004), several address the value-driven, relational qualities central to practical wisdom. Humility, referring to modesty and an accurate sense of self, speaks to a balanced perception of one's self relative to others around them. Curiosity, which promotes seeking out new information, may position individuals to be more open and inquisitive about the experiences of others, which in turn can serve to inform solutions that are responsive to a variety of needs. Fairness and love directly address a valuing of interpersonal relationships and equal treatment of people and ideas. Finally, compassion describes a propensity to value and support the well-being of others, including strangers. Together, these strengths can support a realistic sense of self, while enabling individuals to develop novel, attainable and adaptive solutions from a place of care and concern for the well-being of others.

As an example, individuals who are faced with a problem may possess the socioemotional awareness to recognize how their response may impact other involved individuals. However, key character strengths such as compassion or fairness can provide a necessary direction for applying this information towards a solution that benefits all individuals involved. Similarly, an individual with the self-control necessary for effectively setting and working towards goals, may do so more effectively when motivated by a curiosity to explore new, nontraditional information. The recognition that their own knowledge or capacities may benefit from new perspectives or information further underscores a sense of humility positioning them to be open and responsive to creative solutions. In this way, it may be the combination of emotional awareness and self-control, in conjunction with the use of character strengths, that supports actions reflective of practical wisdom.

The present study seeks to advance our understanding of practical wisdom by exploring how an individual's self-control and socioemotional intelligence relate to practical wisdom, particularly in light of key character strengths associated with this area of study. Moreover, the study will examine these relationships within a workplace context in order to better understanding context-specific practical wisdom. To meet these goals, the present study will address three main questions:

1. Is there a relationship between practical wisdom and:

a. self-control?

- b. socioemotional intelligence?
- 2. Are the character strengths of humility, curiosity, love, fairness, and compassion related to practical wisdom?
- 3. Is the relationship between practical wisdom and the socioemotional abilities of both self-control and socioemotional intelligence moderated by the character strengths of humility, curiosity, love, fairness, and compassion?

Methods

Procedure

Participants were recruited from a 1400 person international organization, with a main headquarters located in a small Midwestern city. The organization was chosen based on qualities expected to lend themselves to the expression of practical wisdom. Specifically, the chosen organization is dedicated to a long-term vision for positive global impact within its field and the extension of knowledge and tools towards community thriving. Moreover, within the organization there is financial and programmatic investment in supporting employee thriving and well-being, particularly through efforts characteristic of practical wisdom (e.g., reflective practices). For example, there is a workgroup that provides training and workshops on awareness, mindfulness, socioemotional intelligence, and conflict resolution, as well as providing one on one support to employees who are facing challenges. While the Human Resources department cites a few guiding principles for employee conduct, the rules given to employees remain at a minimum. Rather, employees are encouraged to not try a failing solution more than once, leaving a wide-open space for creative troubleshooting when problems arise. Together, these organizational qualities parallel several components supportive of practical wisdom in context, such as the promotion of reflective practices, encouragement of creativity and big picture thinking, and a prosocial, long-term purpose at an organizational level.

Participants were recruited via company-wide email announcements, flyer postings around the organization's campus, and in-person recruitment at company-wide events (see Appendix A). Eligibility for the study included (1) being 18 years or older, (2) active employment at the recruitment site, and (3) a minimum of 2 years of work experience. Interested and eligible employees were asked to follow a link to an online survey to be completed in a location and at a time of their choosing. The online survey included an electronic informed letter of consent (see Appendix B) and a survey questionnaire comprised of several self-report measures and one cognitive task. At the conclusion of the survey, participants were asked to enter their email address if they were willing to be contacted for future related studies and/or if they wished to receive a personalized character strengths profile based on their responses to a portion of the completed survey. As an incentive, and per agreement with the organization, participants were allowed to complete the survey during work hours, as well as cite their participation in the study as an employee development activity. Additionally, all participants were entered into a random drawing, and one winner was gifted a catered lunch for their team and a \$400.00 donation made in their name to a local non-profit organization of their choosing. Sample

The present sample consisted of 172 participants, with a mean age of 40.89 years (SD = 11.60). A majority of the sample was female (70.9%), despite a slight male majority reported company-wide (53%). Participants were predominantly Caucasian (83.1%), paralleling company-wide (89.4%) and city demographics (78.9%). Other reported races and ethnicities included Asian (4.1%), African American (1.2%), Indian (1.2%), Latino/Hispanic (1.2%), and

others reporting less than 1%. The participants in this sample were highly educated, with 45.9% holding a Bachelor's degree and 41.3% with a Master's, Professional or Doctorate degree. Eightnine percent (88.9%) of the sample resided between two locations in the United States; however, the remaining participants spanned 10 countries worldwide, with several participating from the UK and India. The average participant had been employed at the organization for 6.15 years (*SD* = 6.99), with about double that time spent working in their individual field generally (12.56 years, *SD* = 10.33). The average self-rating of in-field expertise was 7.05 out 10 for participants, and more than half (52%) of participants reported at least some participation in Emotional-Social Intelligence (ESI) activities offered by their organization. A complete list of sample demographic information can be found in Table 1.

Measures

The online questionnaire included measures of demographics, social desirability, practical wisdom, self-control, socioemotional intelligence, compassion, and character strengths. Together, the questionnaire took approximately 30-45 minutes for participants to complete.

Demographics. Demographic information was collected via a self-report survey at the beginning of the online survey. Participants were asked to report their name, age, sex, race/ethnicity, level of education and degree(s) or concentration, job title and responsibilities, and overall work experience. A complete listing of demographic questions can be found in Appendix C.

Social Desirability. In order to assess any participant tendencies towards self-reporting more favorably towards oneself, a measure of social desirability was included. It was assessed using the Marlow-Crowne Social Desirability Scale, Short-Form 1 (Strahan & Gerbasi, 1972). This 10-item measure assesses an individual's likelihood to respond in a way that seeks social

Table 1

Demographics

Characteristic	Ν	Percentage
Sample	172	<u> </u>
Sex		
Female	122	70.9%
Male	50	29.1%
Age		
21-30	36	20.8%
31-40	48	27.8%
41-50	45	26.1%
> 50	42	24.6%
Missing	1	0.6%
Race/Ethnicity		
Caucasian	143	83.1%
Asian	7	0.4%
Indian/Hindu	3	1.7%
African American	2	1.2%
Latino/Hispanic	2	1.2%
Native American/Indian	2	1.2%
Pacific Islander	1	0.6%
Biracial	1	0.6%
Missing	11	6.4%
Education Level		
Some high School/Diploma/GED	2	1.2%
Some college/ Trade/ Associates	20	11.6%
Bachelor's	79	45.9%
Master's/Professional	40	23.3%
Doctorate	31	18.0%
Location		
United States	153	89.0%
Europe/UK	13	7.5%
India	3	1.7%
Australia	2	1.2%
Korea	1	0.6%
Years at Organization		
0-4 years	100	58.1%
5-10 years	38	22.1%
11+ years	34	19.8%

approval. Participants rated each of the 10 items on a true-false scale, which was then coded to reflect either a (1) *Socially Desirable* or (0) *Socially Undesirable* response. Half of the items endorsed a socially desirable response if marked true, and half if marked false. For example, "*I*

always try to practice what I preach," would receive a score of 1 if marked true, as would, "*I like to gossip at times,*" if marked false. A total score was summed based on these responses, with overall social desirability scores ranging from 0 to 10, with higher scores reflecting a greater propensity to answer questions with a socially desirable response. Cronbach's alpha for this sample was .60. The full scale is available in Appendix D.

Practical Wisdom. Practical wisdom was assessed using the San Diego Wisdom Scale (SD-WISE; Thomas et al., 2017). The scale is a 24-item questionnaire comprised of 6 subscales related to wisdom. The subscales include social advising, emotional regulation, prosocial behaviors, insight, tolerance of divergent values, and decisiveness. The SD-WISE was specifically designed to capture the common dimensions of wisdom that have a neurobiological basis in an effort to advance measurement of wisdom in a multidimensional way. The SD-WISE asks respondents to rate their level of agreement on a Likert-scale ranging from (1) *Strongly disagree* to (5) *Strongly agree*. A sample item from the Insight subscale reads "*It is important that I understand the reasons for my actions*." Individual summative scores range from 24 to 120, with higher scores indicting a greater propensity for practical wisdom. In the current study, the Cronbach's alpha for the overall scale was .83. The alphas for the subscales were as follows: tolerance (.72), decisiveness (.75), emotional regulation (.85), insight (.50), prosocial behavior (.67), and social advising (.73). The full scale is available in Appendix E.

Self-control. Self-control was assessed using the Brief Self-Control Scale (BSCS), a 13item measure of trait self-control shown to be effective for studying relationships to achievement-related outcome variables (Lindner, Nagy & Retelsdorf, 2015). The BSCS asks respondents to rate their level of agreement on a Likert-scale ranging from (1) *Not at all like me* to (5) *Very much like me*. A sample item from the BSCS reads, "*I refuse things that are bad for* *me*." This measure has shown strong internal reliability, test-retest reliability, and content validity (Tangney, Baumeister & Boone, 2004). Summative scores range from 13 to 65, with higher scores indicating greater self-control. In the current study, the Cronbach's alpha was .85. For the full measure, see Appendix F.

Socioemotional intelligence. The Reading the Mind's Eye Test (or "Eyes Test") was used as a task to measure individual capacity for judging mental states (Baron-Cohen, Wheelwright, Hill, Raste & Plumb, 2001). The Eyes Test consists of 1 practice and 36 task items. In contrast to self-report measures seeking to gauge socioemotional intelligence, the Eyes Test offered an assessment of skill. For each item, participants are shown an image of eyes, and asked to pick the best word to describe the feeling expressed by the individual in the image from a selection of 4 words. Each item was coded for correctness, with overall summative scores ranging from 0 to 36. Higher scores indicated greater socioemotional intelligence. The Cronbach's alpha was .56 for the current study. A sample item is available in Appendix G.

Compassion. Compassion was assessed using the Santa Clara Brief Compassion Scale (SCBCS; Hwang, Plante & Lackey, 2008; Plante & Mejia, 2005). This scale is a brief version of the Sprecher and Fehr's Compassionate Love Scale (Sprecher & Fehr, 2005). The SCBCS asks participants to rate 5 distinct items on a scale of (1) *Not at all true of me* to (7) *Very true of me*. A sample item reads, "*I often have tender feelings towards people (strangers) when they seem to be in need*." Composite scores can range from 1 to 7. Cronbach's alpha was .86. Measure items are available in Appendix H.

Character strengths. The VIA-72 assessment was administered in its entirety, although the initial focus of the study was specifically on the character strengths of love, curiosity, fairness, and humility. The VIA-72 is designed to provide a ranking of the individual's most

central character strengths along with overall scores for 24 character strengths (McGrath, 2017; Peterson & Seligman, 2004). The overall measure asks participants to rate 72 items on a scale of (1) Very much unlike me to (5) Very much like me. A sample item addressing humility specifically reads, "I rarely call attention to myself." The VIA Institute on Character completed the scoring externally, and returned an output that included a composite score for each of the 24 individual character strengths, as well as a ranked profile indicating which strengths are most central to an individual's personality. All raw data remained confidential, and results from the survey were provided de-identified to the Institute. Composite scores for individual character strengths range from 1 to 5. Cronbach's alpha for the overall VIA-72 was .91, with alphas for love, curiosity, fairness, and humility reported to be .59, .64, .69 and .72, respectively. The VIA Institute additionally describes its own classification system for the 24 character strengths, yielding 6 "classes" of strengths: wisdom and knowledge, courage, humanity, justice, temperance, and transcendence. Each class is comprised of 3-6 of the initial 24 character strengths. Composite scores for each grouping of character strengths were calculated for followup analyses.

Data Analysis Plan

Descriptive analyses were conducted to examine the means and variability of the primary variables. Bivariate correlations were examined for a general understanding of the interrelationships among key variables in the study. To explore the first and second hypotheses, multivariate regression analyses were conducted, with additional interaction steps added to address the final study question. SPSS Version 25 was used to conduct all analyses (Cohen, 1988; IBM Corp., 2017).

Results

Descriptive Analyses and Variable Distribution

Table 2 presents descriptive statistics for all variables of interest in the current study.

Histogram plots revealed normality across all variables, with less than .05% of participants

reporting outlying scores.

Table 2

Descriptive statistics for dependent variable, practical wisdom, and all independent variables among full sample (N = 172)

Variable	Mean (SD)
Social Desirability*	5.41 (2.02)
Practical Wisdom	97.51 (9.96)
Self-Control	45.31 (8.62)
Socioemotional Intelligence	27.41 (3.72)
Compassion	5.33 (1.04)
Love	3.97 (.67)
Curiosity	3.94 (.67)
Fairness	4.20 (.59)
Humility	3.43 (.77)
* <i>N</i> = 171	

Bivariate Analyses

Bivariate correlations between all variables are displayed in Table 3. Few of the demographic variables significantly related to one another or the dependent variable, practical wisdom. Age correlated positively with years in the current workplace, social desirability, and self-control, and negatively with socioemotional intelligence. Sex positively correlated with socioemotional intelligence and the character strength of love, such that female respondents were more likely to report higher levels of both. Education level positively related to the character strength of curiosity. Longer-term employment at the study site positively related to humility, and negatively associated with participation in emotional social intelligence programming sponsored by the host organization. Additionally, social desirability positively correlated with

Table 3

Summary of Variable Correlations

	1	6	e	4	S	9	L	8	6	10	11	12	13	14	15
1. Age	1														
2. Sex	13														
3. Race	.04	18*	1												
4. Edu	60.	04	002												
5. Years ^a	.55*	.01	02	.14	 										
6. ESI	11	07	.10	12	23*										
7. SocDes ^{c}	$.18^{*}$.02	.11	05	.005	07	!								
8. PracWis ^d	.11	.03	.004	01	.02	13	.23*	1							
9. SelfCont ^e	$.16^{*}$.02	.04	04	.03	07	.33*	$.36^*$	-						
10. SocEm ^f	19*	.15*	08	.02	06	.003	08	12	09						
11. Comp ^g	06	.15	10	13	900.	.04	$.19^{*}$	$.21^*$.01	.02					
12. Love	.03	.24*	12	04	.05	14	.15*	.37*	$.20^{*}$.17*	.20*				
13. Curiosity	05	.12	.06	.21*	.02	15	.13	.43*	.25*	.05	$.16^{*}$.42*			
14. Fairness	08	.08	03	.06	.004	01	.21*	.36*	60.	.02	.35*	.35*	.27*		
15. Humility	.11	-00	12	002	$.16^{*}$	11	.23	60.	.32*	08	.15	.13	.02	.29*	-
<i>Note</i> Ns range fro	m 161 to	172													

Note. Ns range from 161 to 172. *p<.05 ^a Years employed at company ^b Participation in emotional social intelligence programming ^c Social desirability ^d Practical wisdom ^e Self-control ^f Socioemotional intelligence ^g Compassion

practical wisdom, and the independent variables of self-control, compassion, love, and fairness. As expected, practical wisdom significantly and positively correlated with self-control, compassion, and the character strengths of love, curiosity, and fairness. Interestingly, practical wisdom did not correlate with either socioemotional intelligence or humility.

Multiple Regression Analyses

In order to address the first and second hypotheses, main effects were assessed by regressing practical wisdom, as measured by the SD-WISE, on the behavioral qualities of self-control and socioemotional intelligence, as well as the hypothesized character strengths of compassion, love, fairness, curiosity, and humility. Significant positive main effects were expected across all variables with practical wisdom. All models controlled for social desirability, as well as age and sex.

The third hypothesis predicted moderation effects for character strengths on observed relationships between practical wisdom and both self-control and socioemotional intelligence. To explore this, an additional block was added to the regression analyses in order to include an interaction term comprised of each character strength and either self-control or socioemotional intelligence. In order to minimize the effects of multicollinearity with the inclusion of multiple interaction effects in a single model, all continuous variables were standardized (Aiken & West, 1991). As such, the coefficients reported reflect either an increase or decrease in practical wisdom for each one standard deviation change in independent variables, when all other variables are held constant.

Main Effects. First, linear square regressions were used to examine the association between self-control, socioemotional intelligence, and character strengths with practical wisdom, while controlling for age, sex and social desirability. Two separate models were used to explore specific associations between the two skills-related variables, self-control (Model 1) and socioemotional intelligence (Model 2).

Model 1 found a significant positive effect between self-control and practical wisdom (*b* = .25, SE = .07, p = .001). In addition, significant positive effects were observed for the character strengths love (*b* = .18, SE = .08, p = .03), curiosity (*b* = .24, SE = .07, p = .001), and fairness (*b* = .22, SE = .08, p = .004). No effects were observed for the character strengths of compassion and humility. Model 2 revealed a significant negative effect between socioemotional intelligence and practical wisdom (*b* = -.15, SE = .07, p = .03). As in Model 1, significant positive effects on practical wisdom were observed in Model 2 for the character strengths of love (*b* = .23, SE = .08, p = .005), curiosity (*b* = .29, SE = .07, p = .000), and fairness (*b* = .19, SE = .08, p = .01). Neither compassion nor humility were significant. The overall R² was .36 and .34 for Models 1 and 2, respectively. These findings are presented in Table 4.

Interaction effects. To explore the third main hypothesis, moderation effects were examined to assess the extent to which the character strengths of compassion, love, curiosity, fairness and humility impacted the relationship between practical wisdom and both self-control and socioemotional intelligence. These interaction effects were added in the second block of each model. The results are displayed in the bottom half of Table 4. None of the two-way interaction terms for compassion, love, curiosity, fairness or humility were statistically significant, thus indicating that the hypothesized character strengths did not moderate the relationship between either self-control or socioemotional intelligence and practical wisdom.

Table 4

	Mod	lel 1	Moo	del 2
Predictor Variable	b	SE	b	SE
Constant	.000	.06	002	.06
Self-Control	.25*	.07		
Socioemotional Intelligence (SEI)			15*	.08
Compassion	.09	.07	.06	.07
Love	.18*	.08	.23*	.07
Curiosity	.24*	.07	.29*	.07
Fairness	.22*	.08	.19*	.08
Humility	12	.07	06	.07
\mathbb{R}^2	.3	6	.3	34
Constant	003	.07	26	.37
Self-Control x Compassion	14	.07		
Self-Control x Love	05	.07		
Self-Control x Curiosity	.07	.07		
Self-Control x Fairness	.06	.08		
Self-Control x Humility	03	.07		
SEI x Compassion			09	.06
SEI x Love			.10	.08
SEI x Curiosity			.01	.07
SEI x Fairness			01	.07
SEI x Humility			.04	.07
R ²	.3	8		35

Summary of regression models for skills and character strengths regressed on practical wisdom

Note. All models used standardized variables and controlled for age, sex and social desirability. Statistically significant effects denoted as *p<.05.

Follow-up Analyses

Given the existing gap in empirical studies on the relationship between practical wisdom and individual character strengths, two follow-up analyses were conducted to further examine how a combination of character strengths might moderate the relationship between such potential factors. The first considered character strengths in combination with one another per the Virtue Class conceptualizations of the VIA Institute as potential moderators to the observed relationships between practical wisdom and both self-control and socioemotional intelligence. Second, latent profile analyses were conducted to see how emergent categorizations based on the present sample were reflected in the observed effects.

Analysis of virtues. In light of the initial results, the role of character strengths was reconceptualized using the VIA Classification system developed by Peterson and Seligman (2004), authors of the original VIA assessment. This approach assumes that rather than any one individual strength, it may be the combination of several unique character strengths that play a role in observed relationships with practical wisdom. To this end, character strengths were additionally assessed using composite scores reflecting the VIA Classification system (Peterson & Seligman, 2004), which combines all 24-character strengths from the VIA into six predefined clusters: Wisdom and knowledge, courage, humanity, justice, temperance and transcendence. Although the virtue cluster titled wisdom and knowledge contains the word wisdom in it, rather than being a measure of wisdom as conceptualized in the present study, this virtue cluster reflects individual strengths in creativity, curiosity, judgment, love of learning and perspective. For clarity, this virtue cluster will be referred to simply as "knowledge". Additionally, compassion was removed from the follow-up analyses given the absence of main effects in the primary analyses. Two separate multiple linear regression models were conducted to examine the main effects of each of the 6 virtue clusters on practical wisdom as well as their possible interactions with both self-control and socioemotional intelligence. Each model controlled for age, sex and social desirability. At the second step of each regression, interaction effects were added. Independent models were used for self-control and socioemotional intelligence. A full summary is shown in Table 5.

In Table 5, Model 1 indicates a positive main effect between practical wisdom and selfcontrol (b = .33, SE = .08, p < .001), as well as the virtue clusters of knowledge (b = .25, SE = .11, p = .03) and justice (b = .30, SE = .11, p = .006). A significant negative effect was observed between practical wisdom and the virtue temperance (b = -.40, SE = .14, p = .005). In Model 2, a similar significant positive effect was observed between knowledge and practical wisdom (b =.26, SE = .12, p = .03). An additional positive main effect was observed between practical wisdom and the virtue of humanity (b = .30, SE = .13, p = .02), with no effects seen for either socioemotional intelligence or any other virtue clusters. The overall R² was .36 and .31 for

Table 5

Summary of regression for main effects and interactions for self-control (Model 1) and socioemotional intelligence (Model 2) regressed on practical wisdom

	Moo	del 1	Mode	el 2
Predictor Variable	b	SE	b	SE
Constant	001	.06	003	.07
Self-Control	.33*	.08		
Socioemotional Intelligence (SEI)			12	.07
Knowledge	.25*	.11	.26*	.12
Courage	.12	.14	.25	.14
Humanity	.23	.12	.30*	.13
Justice	.30*	.11	.17	.11
Temperance	40*	.14	13	.13
Transcendence	.04	.15	04	.15
\mathbb{R}^2		36	.3	1
Constant	03	.08	01	.07
Self-Control x Knowledge	.08	.12		
Self-Control x Courage	.25	.15		
Self-Control x Humanity	09	.10		
Self-Control x Justice	06	.10		
Self-Control x Temperance	09	.12		
Self-Control x Transcendence	.12	.13		
SEI x Knowledge			.07	.15
SEI x Courage			.03	.15
SEI x Humanity			.05	.15
SEI x Justice			02	.13
SEI x Temperance			.02	.13
SEI x Transcendence			.04	.18
\mathbb{R}^2		39	.32	2

Note. All models used standardized variables and controlled for age, sex and social desirability. Statistically significant effects denoted as *p<.05.
Models 1 and 2, respectively. At the second step of each model, interaction effects did not yield any significant findings. The overall variance in the prediction of practical wisdom using virtue clusters was similar to that of individual character strengths identified in the initial analyses, suggesting no statistical advantage for the virtue cluster conceptualization as presented in these models.

Latent Profile Analysis. Further analyses sought to understand how distinct combinations of virtue classes within the present sample may moderate the observed relationships between self-control and socioemotional intelligence with practical wisdom. Latent profile analysis is a person-oriented model-based approach to examine sample heterogeneity; it divides participants into distinct groups, based on each individual's overall configuration of responses to a set of ordinal or continuous variables (Muthén & Muthén, 1998-2010). The goal of latent profile analysis is to empirically determine the number of distinct groups that likely exist. This determination is based on both explanatory accuracy and parsimony. Statistical models with different numbers of groups are compared to one another. In general, the preferred model is the one with the lowest Bayesian Information Criteria (BIC; Akaike, 1974), a high entropy, and groups that make conceptual sense and are large enough to represent distinct replicable subpopulations. In latent profile analysis, all individuals have a likelihood between 0 and 100% of belonging to each of the groups. For analytic purposes, however, individuals are usually assigned to the group to which they have the highest likelihood of belonging. As long as there is good separation among groups, this step introduces minimal error.

In this study, Mplus 8 (Muthén & Muthén, 1998-2010) was used to conduct latent profile analysis. Scores on the six virtue scales (e.g., knowledge, courage, humanity, justice, temperance, and transcendence) were standardized and used as the observed indicators of the latent profiles. Table 6 summarizes the fit indices of models with two, three, and four latent profiles. Although the model with three groups had the lowest BIC, one of these groups was not conceptually meaningful and included only 7% of the sample, or 13 individuals. The mean scores for all virtues within this subgroup were much lower than the other groups, suggesting that these individuals may represent outliers among the sample. Likewise, the model with four groups had the lowest sample-size adjusted BIC; however, two of these groups were not conceptually meaningful and included only 7% and 3% of the sample, or 13 and 6 individuals, respectively. Each of these subgroups had scores on the extreme ends of the sample, perhaps indicating outliers. Therefore, the model with the two groups was selected.

Table 6

Model fit indices for 2-4 profile solutions

Profiles	BIC	Adj BIC	Entropy
2	2827.30	2748.14	.81
3	2772.26	2651.94	.87
4	2795.12	2633.63	.90

Note. N = 172. All entropy levels were acceptable.

As shown in Figure 1, one of these groups, hereafter referred to as highly virtuous, was characterized by relatively higher scores on all six of the virtue scales. The other group, hereafter referred to as less virtuous, was characterized by relatively lower scores on all six of the virtue scales. When individuals were assigned to the group in which they had the highest likelihood of belonging, 49% of the sample were in the highly virtuous group, and 51% were in the less virtuous group. On average, the likelihood that individuals assigned to the highly virtuous group were actually in that group was 96%; conversely, the likelihood that they were actually in the less virtuous group was only 4%. Similarly, the likelihood that individuals assigned to the less

virtuous group were actually in that group was 94%; conversely, the likelihood that they were actually in the highly virtuous group was only 6%.



Figure 1. Standardized mean values of 6 virtue classes across 2 profile solutions.

Relationship with practical wisdom. Finally, two linear regression models were estimated to examine whether the relation between self-control and socioemotional intelligence with practical wisdom differed for individuals in the highly virtuous and less virtuous latent profile groups. These regression models included the following independent variables: self-control (Model 1) or socioemotional intelligence (Model 2), a dummy variable representing the latent profile group (1 = highly virtuous, 0 = less virtuous), an interaction term representing the product of self-control or socioemotional intelligence and the latent profile group, as well as the covariates, age, sex and social desirability. Results are displayed in Table 7.

In Model 1, a positive main effect was maintained between self-control and practical wisdom (b = .23, SE = .08, p = .004). Model 2 did not show a main effect for socioemotional intelligence. A significant, positive relationship was additionally observed between virtue class and practical wisdom in both Model 1 (b = .32, SE = .08, p < .001) and Model 2 (b = .37, SE = .07, p < .001), such that individuals in the highly virtuous group, were more likely to have higher

Table 7

	Model 1		Model 2	
Predictor Variable	b	SE	b	SE
Constant	002	.07	004	.07
Self-Control	.23*	.08		
Socioemotional Intelligence (SEI)			08	.07
Virtue Class	.32*	.08	.37*	.07
\mathbb{R}^2	,	23	.1	9
Constant	04	.07	008	.07
Self-Control x Virtue Class	.10	.08		
SEI x Virtue Class			03	.07
\mathbb{R}^2	•	23	.1	9

Summary of regression model for skill and either high or low virtuosity regressed on practical wisdom

Note. All models used standardized variables and controlled for age, sex and social desirability. Statistically significant effects denoted as *p<.05.

scores on practical wisdom in both models. However, the interaction terms were not statistically significant, indicating there was no difference between highly virtuous and less virtuous individuals in the relation between either self-control or socioemotional intelligence and practical wisdom.

Discussion

The present study sought to explore whether practical wisdom was related to an individual's self-control and socioemotional intelligence, and whether these relationships were moderated by various character strengths. Main findings from the study supported the first hypothesis, with linear relationships observed between practical wisdom and both self-control and socioemotional intelligence. Although a positive relationship was observed between practical wisdom and self-control, socioemotional intelligence was negatively related to practical wisdom, contrary to expectation. The second hypothesis, which focused on the role of character strengths, was partially supported. As expected positive linear relationships between practical wisdom and the character strengths of love, curiosity, and fairness were observed. However, no relationship was

found with the character strengths of compassion and humility. The third hypothesis, which proposed that character strengths would moderate the relationships between practical wisdom and both self-control and socioemotional intelligence, was not supported.

Findings in relation to self-control from the first hypothesis emerged as expected. Given that the application of wisdom in real time requires thoughtful and intentional action, it follows that a level of self-control may be important for pursuing rational, relevant and meaningful solutions to complex problems that are likely to require wise action (Sternberg, 2004). Behaviors such as purpose setting, perspective taking, and reflective pause are all commonly cited in relation to the emergence of practical wisdom (Grossmann, 2017; Small & Kupisk, 2015; Sternberg, 2004). These strategies require a level of control. For example, working towards actionable and worthwhile goals rather than simply reacting to a dilemma would call for suppressing certain behaviors in favor of others that could bring an individual closer to their desired outcome. The notion of self-control also underscores a need to be engaged with the presenting dilemma in order to actively choose the behaviors and strategies that serve one's ends, while rejecting or avoiding pitfalls that could impede success. In contrast, contexts or guidelines that prescribe actions in response to dilemmas are shown to limit practical wisdom, in part because they allow for disengagement from the presenting situation (Schwartz, 2011). Engaging with the realities of an emerging dilemma in order to optimally respond may provide an advantage for proactively pursuing wise solutions.

Although socioemotional intelligence showed a significant relationship with practical wisdom, this association was in the opposite direction from initial prediction. That is, individuals reporting higher socioemotional intelligence were more likely to score lower on the practical wisdom measure. While unexpected, this may be explained by a number of factors. First,

socioemotional intelligence was measured using a task, whereas the remainder of the study utilized self-report measures. This could mean that while individuals were reporting more practically wise qualities on the latter, the socioemotional task was actually a better reflection of overall ability. Although the Eyes Test allowed for the measurement of how well individuals infer emotion based on nonverbal cues, specifically through expression of the eyes, this ability does not directly speak to how individuals draw on or address certain emotions during the problem solving process. That is, an individual may be capable of identifying sadness, anger, or frustration, without also having the interpersonal tools or contextual information to manage these emotions effectively. Further, cues other than expressed emotion may be particularly important for wisdom in a workplace context, where emotions may be less prominent in individual interactions. There is also a possibility that higher socioemotional intelligence may impair reasoned or unbiased responses characteristic of practical wisdom. Indeed, individuals who are more in tune with the emotions of others may be more likely to respond to problems in ways that directly try to mitigate these emotions, or are reactive in nature, as opposed to seeking a solution for the greatest good (Condon, Dunne & Wilson-Mendenhall, 2019; Valdesolo & DeSteno, 2006). For example, if a person is in conflict with a co-worker, she may choose to act through a path of least resistance in order to quell the co-worker's anger or frustration in the moment, without considering the broader implications such as how the presenting conflict could impact the team dynamic, group output, or ability to work together in the future should the person harbor resentment. Alternately, given the low Cronbach's alpha on the Eyes Test in the present sample, there may be limitations to inferring socioemotional intelligence from this task.

The second hypothesis focused on character strengths. There are several reasons why individuals who scored higher on the character strengths of love, curiosity, and fairness may be more likely to score high in practical wisdom. First, love assumes a general care and concern for others. Given that practical wisdom involves the consideration of how actions may impact others affected by the outcome, it follows that individuals who view others more favorably may seek mutually beneficial solutions. Those who are more curious may additionally find themselves creatively pursuing wise solutions that incorporate a greater amount of context-specific information (Gander et al., 2012). Finally, one of the key distinguishing components of practical wisdom is the pursuit of a greater good. Prioritizing fair and balanced solutions to complex problems may support wisdom in practice (Sternberg, 2004). The expected positive relationship between practical wisdom and both compassion and humility was not observed. Similar to socioemotional intelligence, individuals high in compassion may be overly concerned with other individuals, perhaps at the expense of considering systems-level impacts central to practical wisdom. No relationship was observed with humility. Humbleness is often characterized as an accurate self-assessment that is not overconfident or skewed in order to appear more favorable. A humble individual values modesty and does not consider him or herself to be particularly extraordinary (Peterson & Seligman, 2004). As such, individuals high in humility may not be as likely to report high scores on measures such as practical wisdom, which are meant to highlight positive, desirable skills. Since humility may promote a balanced view of the self, scores on such positive measures may instead appear to be moderate or even low, given that a humble individual may, in addition to seeing their strengths, also acknowledge significant room for growth or improvement.

The study's third hypothesis focused on whether character strengths moderated the relationship between practical wisdom and both self-control and socioemotional intelligence. Findings show an absence of such moderating effects among the current sample. Because

practical wisdom involves responding to the particulars of a situation, the absence of such moderating effects may reflect the variable contexts in which practical wisdom emerges. That is, different challenges may require, or benefit from, distinct character strengths, mitigating the effect that any single character strength carries enough weight to significantly change the way self-control or socioemotional intelligence is applied in response to a given situation. Further, while an individual may have a high score on a particular character strength, for example, demonstrating a high regard for humility, this strength itself may not be most central to who that person is at their core. A more informative conceptualization may be unique constellations of character strengths, or the consideration how top strengths align with the actions warranted by a presenting problem.

The follow-up analyses found some main effects when examining clusters of character strengths, conceptualized as six main virtue classes. The virtue cluster knowledge, humanity, justice and temperance all showed main effects with practical wisdom, across the two models incorporating self-control and socioemotional intelligence. The current findings indicate that the presence of these virtues is related to practical wisdom. Although no interaction effects were observed, initial main effects may provide a basis for future analysis into the relationship between virtues and practical wisdom. The present models considered all virtue clusters together. Given that virtues are inherently positive, the power of any single virtue cluster could be statistically challenging to parse out, with results further mitigated by the moderate sample size. Models exploring individual clusters may thus be more indicative of relationships with practical wisdom and other behavioral components. Additionally, the virtue clusters reflect composite scores of character strengths derived from the VIA-72. The VIA institute offers other measurement tools that may more directly, and effectively, assess virtuous capacity within individuals.

Finally, latent profile analyses revealed two emergent groups of participants from the current sample, one high and the other low in virtuosity. As expected, those high across all virtue classes were also significantly more likely to score higher on practical wisdom. These findings indicate that individuals who tend to score high in one of the virtues also score high across remaining virtue clusters. Given that all individuals are thought to possess character strengths and the ability to develop them further, these profiles may be useful starting points for promoting practical wisdom in applied settings through strengths-based programming. For instance, it may be that individuals who score consistently low across virtues are less able to identify the strengths they already possess. Thus, staff development may enhance the virtuosity reported by staff through employee exploration and identification of key strengths.

Limitations

The current findings should be considered in light of a number of limitations, including generalizability, the use of self-report measures, and the conceptualization of character strengths. The present study is unique in that it explored practical wisdom within a specific context, namely a corporate organization. However, this contributed to a homogenous group of participants, largely middle-class, well-educated, Caucasian and all employed in a similar field. The focal organization has also prioritized employee development such that many skills related to practical wisdom may already be part of the commonplace organizational culture. This may have contributed to the limited range of scores on the central measure of practical wisdom. Although the SD-WISE scores can range between 24 and 120, the mean for the current sample was on the higher end at 97.51 (SD = 9.96). This limited variability in scores could create an artifact

reducing overall statistical significance. This relatively high scoring sample may be a reflection of the sponsoring organization's investment and support of staff development around socioemotional intelligence and reflective practice. Given the significant effects that did emerge within the sample despite limited variability in practical wisdom scores, future research drawing on more diverse samples could shed light on stronger effects. Generalization of these findings thus remains limited and future work would benefit from exploring how such findings translate to different workplaces. Despite an absence of associations in the present sample between practical wisdom and age, sex, race or education, future research would benefit from further examining such relationships among more diverse groups.

With the exception of the Eyes Test, the measures used for this study were based on selfreport. Social desirability showed a moderate correlation with several variables of interest, including practical wisdom. Although every effort was made to control for social desirability in the linear regression models, these initial correlations merit further consideration. Individuals may display a desirability bias in reporting on their own behaviors and preferences in ways that do not reflect their behaviors in applied contexts. The sample additionally skewed female, a demographic associated with helping and prosocial behaviors, perhaps enhancing the observance of social desirability in reporting. This should be afforded special attention in future research, given previous literature noting the connection between humility and practical wisdom. That is, individuals who are considered highly wise may be less likely to score themselves as favorably on a self-report questionnaire due to their humbleness. Moreover, individuals who score higher on practical wisdom may be differentially capable of utilizing these skills in real time as dilemmas unfold. Alternately, characteristics that promote social desirability may also promote practical wisdom, such that individuals who are concerned about the way others interpret their preferences and behaviors may seek out responses to dilemmas in ways that are prosocial and positive. Additional measures of social desirability, such as those that utilize a broader response set rather than a forced true or false response, could further expand our understanding of these relationships. Future research might consider utilizing self-report measures as one component of an overall profile or description of how practical wisdom emerges in the context of daily life.

Finally, attempts to understand the role of character strengths in practical wisdom remains limited. The current study offers one approach for exploring these differences. The use of the VIA-72 presents distinct challenges in conceptualizing character strengths. The version employed in the study is relatively brief, which allowed for its inclusion as part of a longer questionnaire. However, only a few items were allotted to each character strength of interest, reducing the reliability of the measure. Future research may benefit from the use of more indepth measures developed by the VIA that specifically measure virtuosity. Alternately, rather than specific virtue clusters or character strengths, individual capacity for being highly virtuous could provide a stronger foundation from which practically wise solutions emerge, as opposed to individuals who report low virtuosity, more generally.

Future Research and Application

Research. Future research into the application of practical wisdom in applied contexts may benefit from extending findings from the current study in at least two ways. First, the current study took place within one corporate setting. Future studies should explore the qualities contributing to wisdom across different fields and within organizations that operate differently. For example, too many guidelines and rules can inhibit the application of practical wisdom (Schwartz, 2011). The need to operate within certain guidelines may fall on a spectrum based on the organization and the type of career field. Understanding such differences can shed light not

only on individual qualities that support practical wisdom, but how contexts and workplaces may be structured in order to support these ends.

Additionally, there remains a need to effectively bridge quantitative measurements of practical wisdom with observational and qualitative methods. Findings from the current study, which relied heavily on self-report measures, may be bolstered by stronger connections to task-oriented measurements of practical wisdom, as well as qualitative interviews that lend themselves to a more holistic understanding of wisdom in action.

Practical application. Modern workplaces are more complex and fluid than ever before. As organizations seek to effectively integrate several generations of workers with unique skillsets and needs into successful workteams, training for practical wisdom can offer unique benefits in flexibility, systems thinking, and problem solving. Individuals who feel a sense of agency in their work are likely to be more engaged and satisfied, which can have important financial and social benefits for organizations as a whole (Carter, Nesbit, Badham, Parker & Sung, 2016). As individuals feel more confident in their abilities to tackle difficult workplace problems in ways that promote a greater good, teams and companies stand to operate better as well. To this end, research on practical wisdom may prove beneficial by informing the development of organizational benchmarks or assessments for the types of qualities sought in new hires. Indeed, Schwartz (2018) posits that organizations ought to hire for character rather than specific skills, the latter of which can be taught to new employees (Grossmann & Cassidy, 2018). This is in contrast to common practices, which generally seek employees with specific qualifications, who may be more or less capable of contributing to an overall positive and effective work environment beyond their job duties. The qualities contributing to practical

wisdom may also be promoted through training and corporate wellness programs in an effort to better support individual workplace thriving.

Conclusion

The present study contributes to an existing gap in literature by exploring the behavioral, socioemotional, and virtuous factors supporting practical wisdom within the workplace. Practical wisdom is related to feeling a sense of purpose, general well-being, creative idea generation, improved leadership, and more effective problem solving (Avey et al., 2012; Grossmann & Brienza, 2018; Zacher & Staudinger, 2018). Understanding the socioemotional capacities that contribute to practical wisdom in the workplace, and how these qualities may be assessed, can be a useful tool for organizations seeking to develop a productive and engaged staff. Workplaces that encourage utilization of key character strengths in conjunction with intentional value-driven decision-making, stand to benefit as an organizations may, in turn, attract and retain individuals who are prepared to effectively harness their skills and talents towards supporting company missions and goals.

The application of practical wisdom is an important, yet overlooked, potential contributor to organizational success. Employees within the modern workplace are increasingly confronted with challenges that are novel, complex and fast-paced. An organization staffed with individuals able to meet these demands with exceptional judgment and moral excellence can benefit from a positive and productive work environment. Similarly, employees given support and permission to use their unique strengths, experiences, and knowledge to generate meaningful solutions may feel a greater sense of agency and well being, which in turn, can contribute to their productivity and satisfaction in the workplace. In this way, practical wisdom can be one path towards the promotion of thriving at work.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*.Thousand Oaks, CA, US: Sage Publications.
- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, *19*, 716-723. doi:10.1109/TAC.1974.1100705.
- Ardelt, M. (2008). Self-development through selflessness: The paradoxical process of growing wiser. In H.A. Wayment & J.J. Bauer (Eds.), *Transcending self-interest: Psychological explorations of the quiet ego* (pp. 221-33). Washington, D.C.: American Psychological Association.
- Ardelt, M. (2008). Being wise at any age. In S.J. Lopez (Ed.): *Positive psychology: Exploring the best in people*. *Volume 1: Discovering human strengths*. (Vol. 1, pp. 81–108). Westport, CT: Praeger.
- Ardelt, M., & Oh, H. (2016). Correlates of wisdom. *The Encyclopedia of adulthood and aging*, 1-5. doi:10.1002/9781118521373.wbeaa184
- Avey, J. B., Luthans, F., Hannah, S. T., Sweetman, D., & Peterson, C. (2012). Impact of employees' character strengths of wisdom on stress and creative performance. *Human Resources Management Journal*, 22(2), 165-81. doi:10.1111/j.1748-8583.2010.00157.x
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *The American Psychologist*, 55(1), 122–136. doi: 10.1037/0003-066X.55.1.122
- Bangen, K. J., Meeks, T., & Jeste, D. V. (2013). Defining and assessing wisdom: A review of the literature. American Journal of Geriatric Psychiatry, 21(12), 1254-66. doi:10.1016/ j.jagp.2012.11.020

Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, I. (2001). The "Reading the Mind's Eye" Test Revised Version: A study with normal adults, and adults with Asperger Syndrome or High-functioning Autism. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(2), 241-51.

Bassett, C. (2005). Emergent wisdom: Living a life in widening circles. ReVision, 27, 6-11.

- Bassett, C. (2011). Understanding and teaching practical wisdom. *New Directions for Adult and Continuing Education*, *131*, 35-44. doi:10.1002/ace
- Carter, R. W., Nesbit, P. L., Badham, R. J., Parker, S. K., & Sung, L. K. (2016). The effects of employee engagement and self-efficacy on job performance: A longitudinal field study. *The International Journal of Human Resource Management*, 29(17), 2483-2502. doi:10.1080/09585192.2016.1244096
- Cohen, J. (1988). Statistical Power Analysis for the Behavioral Sciences, 2nd ed. Hillsdale, NJ: Erlbaum.
- Condon, P., Dunne, J., & Wilson-Mendenhall, C. (2019). Wisdom and compassion: A new perspective on the science of relationships. *Journal of Moral Education*, 48(1), 98-108. doi:10.1080/03057240.2018.1439828
- Corral-Verdugo, V., Tapia-Fonllem, C., & Ortiz-Valdez, A. (2015). On the relationship between character strengths and sustainable behavior. *Environment and behavior*, 47(8), 877-901. doi:10.1177/0013916514530718
- Gander, F., Proyer, R. T., Ruch, W., & Wyss, T. (2012). The good character at work: An initial study on the contribution of character strengths in identifying healthy and unhealthy work-related behavior and experience patterns. *International archives of Occupational* and Environmental Health, 85(8), 895-904. doi:10.1007/s00420-012-0736-x

- Grossmann, I. (2017). Wisdom in context. *Perspectives on Psychological Science*, *12*(2), 233-57. doi:10.1177/1745691616672066
- Grossmann, I., & Brienza, J.P. (2018). The strengths of wisdom provide unique contributions to improved leadership, sustainability, inequality, gross national happiness, and civic discourse in the face of contemporary world problems. *Journal of Intelligence*, 6(22), 1-17. doi:10.3390/jintelligence6020022
- Grossmann, I., Brienza, J. P., & Bobocel, D.R. (2017). Wise deliberation sustains cooperation. *Nature Human Behavior*, 0061(1), 1-6. doi:10.1038/s41562-017-0061
- Grossmann, I., & Cassidy, C. (Hosts). (2018, December 28). Wisdom at work (with Barry Schwartz) [Audio podcast]. Retrieved from https://onwisdompodcast.fireside.fm/11
- Hwang, J., Plante, T., & Lackey, K. (2008). The development of the Santa Clara Brief Compassion Scale: An abbreviation of Sprecher and Fehr's Compassionate Love Scale. *Pastoral Psychology*, 56(4), 421-28. doi:10.1007/s11089-008-0117-2
- IBM Corp. Released 2017. IBM SPSS Statistics for Macintosh, Version 25.0 [Computer software]. Armonk, NY: IBM Corp.
- Jeste, D. V., Ardelt, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert Consensus on Characteristics of Wisdom: A Delphi Method Study. *The Gerontologist*, 50(5), 668–680. doi:10.1093/geront/gnq022
- Joosten, A., Dijke, M. V., Hiel, A. V., & Cremer, D.D. (2015). Out of control?! How loss of selfcontrol influences prosocial behavior: The role of power and moral values. *PLoS One; San Francisco*, 10(5), 1-20. doi:10.1371/journalpone.0126377

Kramer, D. (2000). Wisdom as a classical source of human strength: Conceptualization and

empirical inquiry. *Journal of Social and Clinical Psychology*, *19*(1), 83–101. doi:10.1521/jscp.2000.19.1.83

- Kupisk, D. (2016). The role of practical wisdom in youth practice. Unpublished master's thesis, The University of Wisconsin-Madison, Madison, Wisconsin.
- Lindner, C., Nagy, G., & Retelsdorf, J. (2015). The dimensionality of the Brief Self-Control Scale-An evaluation of unidimensional and multidimensional applications. *Personality* and Individual Differences, 86, 465-73. doi:10.1016/j.paid.2015.07.006
- Mayer, J. D., Roberts, R. D., & Barsade, S. G. (2008). Human abilities: Emotional intelligence.
 Annual Review of Psychology, 59, 507-36. doi:10.1146/annurev.psych.59.103006.
 093646
- McGrath, R. E. (2017). *Technical report: The VIA Assessment Suite for Adults: Development and evaluation*. Cincinnati, OH: VIA Institute on Character.
- Muthén, L. K., & Muthén, B. O. (1998-2010). *Mplus User's Guide*. Sixth Edition.Los Angeles, CA: Muthén & Muthén
- Park, N., Peterson, C., & Seligman, M.E.P. (2004). Strengths of character and well-being. Journal of Social and Clinical Psychology, 23(5), 603-19.
- Peterson, C., & Park, N. (2006). Character strengths in organizations. Journal of Organizational Behavior, 27, 1149-1154. doi:10.1002/job.398
- Peterson, C., & Seligman, M. E. P. (2004). Character strengths and virtues: A handbook and classification. New York: Oxford University Press and Washington, DC: American Psychological Association.
- Plante, T., & Mejia, J. (2016). Psychometric properties of the Santa Clara Brief Compassion Scale. *Pastoral Psychology*, 65(4), 509-15. doi:10.1007/s11089-016-0701-9

- Schmit, D. E., Muldoon, J., & Pounders, K. (2012). What is wisdom? The development and validation of a multidimensional measure. *Journal of Leadership Accountability and Ethics*, 9(2), 39-54.
- Schutte, N. S., Malouff, J. M., & Bhullar, N. (2009). The assessing emotions scale. C. Stough, D. Saklofske & J. Parker (Eds.), *The Assessment of Emotional Intelligence*. New York: Springer Publishing, 119-135.
- Schwartz, B. (2011). Practical wisdom and organizations. *Research in Organizational Behavior*, *31*, 3-23. doi:10.1016/j.riob.2011.09.001
- Schwartz, B., & Sharpe, K.E. (2010). *Practical wisdom: The right way to do the right thing*. New York, NY: Riverhead Books.
- Schwartz, B., & Sharpe, K.E. (2006). Practical wisdom: Aristotle meets positive psychology. *Journal of Happiness Studies*, 7, 377-95. doi:10.1007/s10902-005-3651-y
- Seo, M. G., & Barrett, L. F. (2007). Being emotional during decision making- good or bad? An empirical investigation. Academy of Management Journal, 50(4), 923-940. doi:10.2307/ 20159897
- Sharma, A., & Dewangan, R. L. (2017). Can wisdom be fostered: Time to test the model of wisdom. *Cogent Psychology*, 4(1), 1-17. doi:10.1080/23311908.2017.1381456
- Small, S. A., & Kupisk, D. (2015). Wisdom in practice. In M. Walcheski and J. Rienke (Eds.), *Family Life Education: The Practice of Family Science* (3rd ed., pp.17-26). Minneapolis: National Council on Family Relations.
- Sprecher, S., & Fehr, B. (2005). Compassionate love for close others and humanity. *Journal of Social and Personal Relationships*, 22, 629–651.

Sternberg, R. J. (1998). A balance theory of wisdom. Review of General Psychology, 2(4), 347-

- Sternberg, R. J. (2004). What is wisdom and how can we develop It? *Annals of the American Academy of Political and Social Science*, *591*(1), 164–174. doi:10.1177/ 0002716203260097
- Strahan, R., & Gerbasi, K.C. (1972). Short, homogenous versions of the Marlow-Crowne Social Desirability Scale. *Journal of Clinical Psychology*, 28(2), 191-3.
- Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271-324.
- Thomas, M. L., Bangen, K. J., Ardelt, M., & Jeste, D. V. (2017). Development of a 12-item abbreviated three-dimensional wisdom scale (3D-WISE-12). Assessment, 24(1), 71-82. doi:10.1177/1073191115595714
- Thomas, M. L., Bangen, K. J., Palmer, B. W., Martin, A. S., Avanzino, J. A., Depp, C. A., Glorioso, D., Daly, R. E., & Jeste, D.V. (2017). A new scale for assessing wisdom based on common domains and a neurobiological model: The San-Diego Wisdom Scale (SD-WISE). *Journal of Psychiatric Research*. doi:10.1016/j.jpsychires. 2017.09.005
- Valdesolo, P., & DeSteno, D. (2006). Manipulations of emotional context shape moral judgment. *Psychological Science*, *17*(6), 476-77.
- Webster, J. D. (2007). Measuring the character strength of wisdom. *International Journal of Aging and Human Development*, 65(2), 163-83. doi:10.2190/AG.65.2.d
- Wagner, L., & Ruch, W. (2015). Good character at school: Positive classroom behavior mediates the link between character strengths and school achievement. *Frontiers in Psychology*, 6. doi:10.3389/fpsyg.2015.00610

Zacher, H., & Staudinger, U. M. (2018). Wisdom and well-being. In E. Diener, S. Oishi & L. Tay (Eds.), *Handbook of Well-Being*. Noba Scholar Handbook series: Subjective wellbeing. Salt Lake City, UT: DEF publishers. doi:nobascholar.com

Chapter 3

Study 2: Using Practical Wisdom to Respond to Workplace Dilemmas

The workplace is a key setting of daily life for most individuals. Success and well-being at work can provide emotional and financial benefits to individuals and the organizations for whom they work. However, common challenges often arise that may impede these outcomes. As workplaces become increasingly complex, the challenges faced by individuals become more novel and unpredictable, necessitating solutions that are adaptable and creative (Elkington & Booysen, 2015; Nonaka, 2017; Prewitt, 2002; Snowden & Boone, 2007; Zhou, Hirst & Shipton, 2012). Employees able to effectively take on these challenges in an agentic way may be more likely to feel successful and satisfied in the work they are doing, which can translate into better work environments and personal and organizational success (Elfering, Simone, Semmer & Kaiser-Freiburghaus, 2005; Elkington & Booysen, 2015; Cesário & Chambel, 2017; Ramlall, 2008). As such, organizations are recognizing a growing need to equip employees with both the technical and psychological resources to remain engaged, productive, and satisfied in the workplace (Hurst, 2013; Moore, 2013; Paterson, Luthans & Jeung, 2013; Prewitt, 2002). Such psychological resources aim to promote thriving at work, a socially-embedded concept that focuses on the symbiotic relationship between individual and workplace in order to promote decision-making, a culture of mutual trust and respect, opportunities for information sharing, and strong relational support (Koçak, 2016; Spreitzer & Porath, 2013; Thun & Kelloway, 2011). Applying a practical wisdom lens to better understand how individuals address challenges in evolving and complex work environments may be one useful mechanism for considering how to better equip employees with the skills needed to thrive at work (Hurst, 2013; Statler, 2014).

For centuries, philosophers, scientists, and laypeople alike have been interested in understanding practical wisdom, particularly because of the potential benefits that arise when challenges are addressed in holistic, effective, and ethical ways. Practical wisdom is considered a desirable, uniquely human trait worth pursuing for its own sake (Ardelt, 2011; Baltes & Staudinger, 2000; Jeste et al., 2010). It is commonly conceptualized as a multidimensional quality that integrates cognitive, affective, and behavioral components towards supporting individuals in addressing complex situations in responsive, flexible, and socially beneficial ways (Ardelt, 2004; Schwartz, 2011; Staudinger & Glück, 2011). Character strengths that underscore individual values can add a moral component necessary for driving such capacities towards wise solutions that are socially responsible and moral (Park, Peterson & Seligman, 2004; Park & Peterson, 2009). As such, individuals who respond in practically wise ways are both able to direct their behavior towards wise solutions and remain in tune with the relational or intuitive factors that are contributing to a given situation. Inherent in this definition is the combination of skills that allow individuals to respond in practically wise ways, such as setting worthwhile and attainable goals, practicing perspective taking, and engaging in reflective practices, along with a moral desire to guide these behaviors towards positive ends (Schwartz, 2011).

Building on the work of philosophers and modern scientists, practical wisdom is defined here as an ability to take thoughtful, intentional and ethical action in response to important, difficult, or uncertain situations (Ardelt, 2004; Bassett, 2005; Kupisk, 2016; Small & Kupisk, 2015; Sternberg, 2004). Although practical wisdom is often characterized by such actions, our knowledge of how these responses unfold in real time within distinct contexts, such as the modern workplace, remains limited. There are likely qualities about particular workplaces that serve to either promote or hinder the development of wisdom. For example, the way in which employees think about problems and the solutions they seek may, to some extent, be guided by the mission and values of the company at large. In this way, companies that explicitly state and work towards value-driven goals and express a clear purpose supporting a greater good have inherently provided their employees with a framework for thinking about problems in ways that align with the basic tenets of practical wisdom. Similarly, in addition to workplace characteristics, distinct individual qualities may support or limit one's capacity to act wisely in a given situation. Individuals with strong personal relationships with coworkers or the communication skills necessary for seeking help from others are in a better position to set achievable goals and consider others' perspectives when confronted with a workplace challenge.

Current literature on wisdom has not explicitly attempted to bridge these distinctions, despite widespread agreement that practical wisdom itself is a combination of many factors working together (Ardelt, 2004; Baltes & Staudinger, 2000; Bassett, 2005; Kupisk, 2016). The majority of discourse centers around the qualities people seek to emulate, but little is known about how these abilities manifest in the day-to-day life of the workplace. In light of this, the present study will explore how individuals tackle difficult workplace problems, with particular attention to differences that exist in the expression of practical wisdom between individuals. To meet this goal, the present study will address two main questions:

- 1. How do individuals within an organizational setting respond to complex problems and how do these strategies align with our current understanding of practical wisdom?
- 2. Are there meaningful differences that exist between the practical wisdom strategies utilized by individuals in the workplace setting, particularly in ways that may inform effective workplace leadership and practices?

Methods

Procedure

Participants for this study were recruited from a larger sample of individuals who previously completed an online survey exploring the connection between practical wisdom and various behavioral and character qualities. As part of this survey, individuals were asked if they would be willing to be interviewed in a follow-up study. Those who responded with interest were considered for the current study. Participants in this original sample were recruited from a 1400 person organization that seeks to promote an internal culture that aligns with several key components related to practical wisdom, such as reflective practice, autonomous decisionmaking, enhanced socioemotional intelligence, and a value-driven mission.

As part of the survey administered to the original sample, participants completed a selfreport questionnaire assessing practical wisdom, measured using the San Diego Wisdom Scale (SD-WISE; Thomas et al., 2017). Participants who scored in either the top or bottom quartile on this measure were contacted by email and invited to participate in the present follow-up study. Interviews were scheduled in an ongoing effort until all spots were filled by those first to sign up, with an effort to recruit an equal number of male and female participants and an equal number of individuals with scores in the top or bottom quartile on the SD-WISE. Those who were interested were asked to sign up online for a semi-structured interview expected to last 30-45 minutes. Prior to their scheduled interview, participants were provided with the interview prompt so that they could begin to think about the dilemma they would like to discuss. A private space on site at the organization was reserved for interviews. Participants were additionally given the option to interview in a private lab space on the University campus, although none utilized this option. Upon arrival, participants were asked to read and sign a consent form (Appendix I). In keeping with similar procedures for exploring wisdom in practice, participants were asked to complete a short survey about the event they planned to discuss, and then an interviewer administered the practical wisdom interview and follow-up questions. Per agreement with the recruitment site, individuals were allowed to participate in the interview during company time, and cite their participation as an employee development exercise. As a 'thank you' for their time, each participant received \$25.00 to be applied to their choice of either Amazon or Donorschoose.org, the latter option serving as an added incentive for a sample that largely reported a high SES and potentially altruistic tendencies (Imas, 2014).

Sample

The present sample consisted of 24 participants, at which point all interview slots were filled and data had reached theoretical saturation. Participant mean age was 41.13 years (SD = 12.78), and 83% of the sample was Caucasian; these demographics mirror those of the larger sample, which reported a mean age of 40.89 years and 83% of participants as Caucasian. Half of the sample was female, and 88.5% reported an education at or exceeding Bachelor's level, with a quarter holding a Master's degree and 16.7% a doctorate. Similar to the larger sample, about half of participants reported having had some exposure to events or company training associated with building emotional social intelligence capacities. The average participant in this sample reported working at the organization for 5.73 years (SD = 6.88). The subsamples from the high and low scoring quartiles were similar across demographics, although the lower scoring subgroup reported longer employment at the organization on average (M = 7.01, SD = 9.25), than their higher scoring counterparts (M = 4.45, SD = 3.14). A full description of sample demographics can be found in Table 1, including demographics within subsample groups.

Table 1

Demographics

	Frequency		
		High SD-WISE	Low SD-WISE
Characteristic	Overall Sample	Sub-Group	Sub-Group
Sample	24	12	12
Sex			
Female	12 (50.0%)	6 (50.0%)	6 (50.0%)
Male	12 (50.0%)	6 (50.0%)	6 (50.0%)
Age			
Mean (SD)	41.13 (12.78)	41.50 (<i>13.17</i>)	40.75 (12.96)
21-40	12 (50.0%)	7 (58.3%)	5 (41.7%)
41+	12 (50.0%)	5 (41.7%)	7 (58.3%)
Race/Ethnicity			
Caucasian	20 (83.4%)	9 (75.0%)	11 (91.7%)
Other	2 (8.3%)	2 (16.7%)	0
Missing	2 (8.3%)	1 (8.3%)	1 (8.3%)
Education Level			
Some college/ Trade/ Associates	3 (12.5%)	2 (16.7%)	1 (8.3%)
Bachelor's	11 (45.8%)	5 (41.7%)	6 (50.0%)
Master's/Professional	6 (25.0%)	3 (25.0%)	3 (25.0%)
Doctorate	4 (16.7%)	2 (16.7%)	2 (16.7%)
Years at Organization			
Mean (SD)	5.73 (6.88)	4.45 (3.14)	7.01 (9.25)
0-4 years	14 (58.3%)	6 (50.0%)	8 (66.7%)
5-10 years	7 (29.2%)	6 (50.0%)	1 (9.3%)
11+ years	3 (12.5%)	0	3 (25.0%)

Measures

Event Reconstruction Survey. A brief 7-item event reconstruction questionnaire was presented for participants to fill out on paper prior to beginning the interview (Brienza, Kung, Santos, Bobocel & Grossmann, 2017). This technique is used in other self-generated measures of practical wisdom as a mechanism for enhancing recall of events through intentional focusing on details of the event and how it unfolded (Robinson & Clore, 2002; Schwarz, Kahneman & Xu, 2009). Participants were asked to think of a dilemma that occurred in the workplace within the last year that was particularly complex, unclear, or ethically complicated, and that involved at

least one other individual. They were then prompted to think about and visualize details of the scenario. For example, "*What day of the week was it?*" or, "*What were you doing when it happened?*" The full measure can be found in Appendix J.

Practical Wisdom. Practical wisdom involves the strategies, heuristics, and thinking processes used by individuals to respond to complex or challenging dilemmas in ways that are ethical and seek a greater good (Sternberg, 2004). In order to explore this ability, semi-structured interviews were conducted using the Wisdom Incident Solving Experience (WISE) interview protocol developed for this study. Following the event reconstruction survey, the WISE asked participants to (1) describe a challenging dilemma they had experienced within the last year that involved at least one other individual and (2) the steps and reasoning processes they utilized in response to the presenting dilemma. Additionally, participants were asked three follow-up questions including (1) whether they have a purpose to the work that they do, (2) how they might advise someone else to handle a similar situation, and (3) if experiencing the dilemma changed the way they think about their work. The full interview protocol is described in Appendix K. All interviews were recorded and transcribed verbatim in a 2-step process that involved utilization of an online program for initial transcription, and then checking and editing for accuracy by trained research staff.

Data Analysis Plan

In order to better understand the context in which practical wisdom emerges in the workplace, directed-content analysis was used to examine interviews for themes referenced in literature as contributing to or being characteristic of practical wisdom, as well as the types of problems most often described by participants. Using mixed- methods and visual tools available in MAXQDA 2018, commonly observed themes indicative of practical wisdom were further

examined for differences in quality and quantity of use (VERBI Software, 2017). Specifically, differences in frequency of use for all common themes were explored between participants scoring in the high and low quartiles of the SD-WISE. These differences were compared to scores assigned to all interviews based on a thematic coding rubric. This allowed for a deeper understanding of how qualitatively evaluated practical wisdom aligned with scores from a more standardized self-report questionnaire.

Results

Coding

Directed content analysis. Existing literature supports a variety of strategies and behaviors characteristic of wise action. The present study applied directed content analysis to explore the emergence of practical wisdom qualities among interview responses (Hsieh & Shannon, 2005). Once all 24 interviews were transcribed, a four step process was used to analyze the data. First, a random subset (25%) of responses were selected for initial coding. Common processes or strategies that aligned with preexisting literature on practical wisdom were highlighted within these interviews in order to inform general codes to be used throughout further analyses. Codes could span as much of a response as needed to fully encompass the nonlinear and complex nature of many responses. Next, codes that described or relied on similar actions or thinking processes were grouped into *families* of like-themes (Campbell, Quincy, Osserman & Pedersen, 2013). The remainder of interviews were then coded for observed codes and broader code-families, while remaining open to new patterns not evidenced in the initial subset of interviews. Finally, descriptions were developed to explain each code and it's corresponding code *family*. Although individual codes described qualities or behaviors indicative of practical wisdom, the description of each code *family* was guided by preexisting literature

reflecting broader conceptualizations of practical wisdom (Bangen, Meeks & Jeste, 2013). The development of descriptions and code families was an iterative process whereby initial observances by the thesis author were brought back to a 2-person research team in order to clarify overlapping or ambiguous concepts. The final descriptions were developed such that they provided all necessary information to be able to determine whether a particular component was observed while reading interviews. MAXQDA, a qualitative data analysis tool, was used for all thematic coding and subsequent analyses (VERBI Software, 2017).

Scoring. Finalized thematic codes and code families which emerged from directed content analysis served to inform the development of a guidebook and coding rubric used by the 2-person research team. Once more, a random subset of seven interviews (29%) was selected for coding using the finalized coding scheme. Coders were provided with descriptions of each overarching thematic code family and its underlying codes, with examples for each. Examples ranged in quality to demonstrate the range with which various components could be utilized. Coders were then instructed to rate each interview on a scale of (1) *Low* to (3) *High* on overall practical wisdom, and then additionally score each code family on the same scale ranging from (1) *Low* to (3) *High*. Interview ratings were completed using a scoring rubric. See Appendix L for coding guidelines and scoring rubric. Intraclass correlations assessed the inter-rater reliability. There was complete agreement (100%) for the overall practical wisdom scores, with individual components revealing high correlations, ranging between .80 and 1.0. Table 2 has a complete listing of intraclass correlations by code.

Analysis

Problem Types. Participants in this study were asked to describe a difficult or complex problem they had experienced at work within the last year that involved at least one other

individual. The prompt allowed for self-generated problems to be the focus of the interview. The common themes among *types* of problems participants described served as an indicator of the broader context in which challenging situations emerge within the workplace.

Table 2

	Single Measures Intraclass Correlation	95% Confidence Lower Bound
All Variables Together	0.84	.66
Overall Interview	1.00	
Pragmatics of Life	0.92	.65
Affect Regulation	0.93	.70
Reflective Practices	1.00	
Tolerance of Ambiguity	0.82	.34
Systems Thinking	0.80	.17

Intraclass Correlations for Practical Wisdom Components

Half (50%) of participants discussed a problem that was primarily interpersonal in nature, focusing specifically on interactions where hostile behavior, difficult personality traits, or individual differences directly and negatively impacted one's well-being or experiences. The ways in which such interpersonal problems were expressed varied. For example, one individual discussed feeling unheard or dismissed when suggesting a possible solution to an on-going problem. Another employee focused on a workgroup teammate who was upset with them for taking an action they considered to be an overreach in power. A negative work environment comprised a quarter (25%) of the problems discussed by the participants. Some work environment problems involved or stemmed from interpersonal issues, but this category remained distinct in its focus on the overall context that was negatively impacted by a problem. For example, one participant talked about a co-worker who was disproportionately dismissive to females in the workplace. Although this behavior was not directed toward the participant, who was male, he was nonetheless concerned about how the behavior created a context in which the

entire work team was uncomfortable, and in particular, how such actions impacted his female coworkers and friends. A smaller portion (16.7%) of participants described making a personal error in the workplace that resulted in stress or anxiety. For example, after a documentation error, one participant had to involve several other departments in order to make sure processes were running accurately. Finally, a minority of participants (8.3%) described their dissatisfaction with a company process or guideline, discussing how these issues directly impacted their day-to-day ability to perform job duties. For example, one such policy, which the organization was unwilling to amend, involved a mechanical setting that increased the chance of errors in a daily task for a participant. Half (50%) of problems described by participants were resolved, while half remained ongoing or unresolved, even at the time of the interview. Within each problem type, the percentage of resolved problems ranged from 50% for interpersonal or environment problems to 25% for problems stemming from personal errors. Of the smaller portion that described an organizational policy or guideline, none had been resolved. This may, in part, reflect the more intensive and long-term solutions required for fostering change at a systemic level, as opposed to resolving conflict directly with others.

The recall survey completed by participants prior to the start of the interview questions shed light on additional characteristics of the dilemmas discussed. Half (50%) had occurred within the last 6 months, and one third reportedly occurred in the afternoon hours of the workday. A majority of participants discussed problems that involved their boss (70.8%) and/or a co-worker (79.2%). A third (33%) of participants considered someone who was involved in conflict to also be a friend. A quarter (25%) of the sample described a conflict that involved a mentor, and 20.8% discussed a problem involving a subordinate. When asked to write down the feelings they associated with or experienced in relation to the problem, the most frequently used

word was frustration. Other common terms used to describe difficult experiences included embarrassment, sadness, regret, and anxiety. A word cloud representing the most common thoughts written down by participants to describe their feelings of the experienced problem are shown in Figure 1, with word size correlating positively with frequency of use.



Figure 1. Word cloud representing respondent's feelings or thoughts related to the problem they discussed, with size correlating to frequency of occurrence (N = 24).

Practical wisdom components. The primary objective of the present study was to explore the ways responses to complex dilemmas within a workplace setting align with current understandings of practical wisdom. Based on existing literature, practical wisdom is considered an intentional, ethical, and positively motivated response to complexity or uncertainty, in particular as it may support a greater good (Ardelt, 2004; Baltes & Smith, 2008; Sternberg, 2004). Analysis of interviews with employees describing their experience of and response to a complex problem in the workplace revealed 5 main components to practical wisdom. They were termed pragmatics of life, affect regulation, reflective practice, tolerance of ambiguity, and systems thinking. Each component was exemplified through various elements, reflecting common strategies or thinking processes utilized by participants across responses. These components and their subsequent supporting behaviors are outlined below. Although each component and their accompanying elements are described individually, it is through the application of several factors in conjunction with one another that supported the emergence of practical wisdom in practice.

Pragmatics of Life. The first component, *pragmatics of life*, refers to strategies that employ broader belief systems or perspectives on life, particularly as they are informed by past experiences of the self or others. The elements that supported pragmatics of life underscored the notion that no single individual has the best answer to a problem, in isolation from informative experiences, the wisdom of others, or a general direction guided by values or morals. Three elements emerged in support of this component: reliance on personal beliefs, seeking the guidance of others, and drawing on past experiences.

Belief systems. Belief systems were utilized when participants identified guiding beliefs, values, or principles that shaped the way they reasoned about and responded to a presenting problem. These general beliefs about what can drive outcomes or behaviors were often used as a way to think about the problem in a more balanced and objective way. For example, one participant who had been frustrated about someone she reports to, shared:

A thing that has been helpful to kind of keep in mind, is that if you come into every situation assuming that everyone just wants the project to succeed, no one's an evil mastermind [...] like we're all here to do our jobs -- Once they kind of realize that and

start taking that attitude into meetings, it helps because it took me out of like 'everyone's out to get me.'

Outside guidance. An essential element of pragmatics of life involved recognizing that others may have valuable insights to offer in relation to navigating a presenting problem. Over half of the sample directly referenced turning to others for support. While participants often turned to colleagues or supervisors for such directives (e.g., "I went and talked to my supervisor about it and we thought it was still a good product, but we needed to prove."), others additionally sought support outside of the workplace. As one participant shared, "I reached out to like, okay to a family member, my husband and said, *what do I do? How do I address this?*"

Past experiences. Most prevalent among the life pragmatics was the consideration of past experiences. Relevant lessons learned from past experiences were interpreted in order to shape how individuals thought about or responded to a presenting problem, and included both personal experiences as well as those of others. One participant shared:

I knew that this was contentious, because when I've been shadowing the person who trained me, we had gone through this twice already. So I was well prepared for the fact

that this could drag on for over a month and be really feisty. And I didn't want that. This example illustrates how seeing a similar pattern play out influenced this individual to set goals specifically to seek a different outcome. Moreover, seeing the process unfold in an undesirable way in the past steered her towards trying to anticipate problems that could arise.

Observed differences in pragmatics of life. While a majority of participants utilized all three elements of the component pragmatics of life to some extent, the examples above illustrate exemplars from higher scoring individuals in the current sample. In contrast, participants who received lower ratings on this component of practical wisdom tended to make fewer specific

connections between experiences that had shaped their thinking or beliefs about handling similar problems and their real time approach to doing so. For example, one participant stated that in hindsight she would *not* change her initial response to a co-worker who was breaking a company policy, while simultaneously saying that she would advise a friend to handle the problem differently than she had. This contradiction suggested a limited insight into and application of her experience with the discussed dilemma. Another participant, while acknowledging, "I have dealt with [many] issues like that, and having engagements like that I was able to actually think clearly," did not elaborate on the way these past experiences shaped the *ways* in which he sought clarity or calmness when facing new dilemmas.

Affect Regulation. A second component that emerged was affect regulation, which involved the ability to identify, discuss, or manage feelings in relation to a presenting problem. Rather than muting or disregarding personal feelings, individuals who demonstrated a capacity for affect regulation were able to draw on rationality and self-control to recognize and address emotions in healthy and productive ways. Broadly, this type of regulation included use of personal mantras, making time to decompress, or engaging in physical activity in order to manage intense emotions.

Informed intuition. One element of affect regulation involved the rational and applied use of intuition. Rather than reacting or acting purely on a gut feeling, informed intuition refers to the ability of sensing the broader context within which a problem unfolds and choosing actions in response to those characteristics. For example, one participant described how he supported a subordinate whose negative behavior patterns proved difficult to alter:
For me it was, part of it was, I need to change my tactic. I'm clearly not getting through, you know, the way I'm doing this. What else could I do? And it was kind of one of those moments of, well let's try this, let's try laying it all out in black and white. And so be it.
In this example, the individual does not have an explicit strategy or rationale for trying a new approach, other than having a sense that something different from his previous attempts may prove more effective. This intuition led to new developments that were more in tune with the interpersonal needs of the employee he was trying to support.

Affect identification. Half of participants directly identified feelings they experienced while a problem was unfolding. Understanding and acknowledging internal states was often a precursor for guiding responses in a way that would mitigate the experience of negative feelings. For example, one woman acknowledged that a mistake she made on the job, "was a little embarrassing because it kind of showed a lack of knowledge on my part and something that you know I should have known and that I missed." She goes on to describe feeling embarrassed and panicked, and how when those emotions are present, "our immediate response is just defensiveness or [...] what's going to happen from all this?" However, these feelings of embarrassment and panic led her to listen more to the people around her and in the meetings that followed. In this way she was able to utilize the skill of active listening to better understand the problem itself, along with the personalities and needs of others involved, which ultimately led to a positive outcome in resolving the initial error that was made.

Affect management. Although less common, affect management involved specific strategies or actions individuals utilized in order to prevent clouding of judgment or a reactionary response. Of the participants who described such emotional management, a majority also demonstrated an ability to identify the feelings they were experiencing and how they might have

impacted their response. This suggests that perhaps an important precursor to effectively managing strong emotions is being able to identify precisely how certain feelings are influencing the presenting situation. In some instances, affect management involved viewing the problem outside of oneself, "I can compartmentalize all of his frustration and see it for what it is, and not let it, not take it personally." Others identified very concrete actions, such as a personal mantra, "You feel embarrassed, you feel like you did something wrong. And I started using this mantra to kind of calm down my senses. Just like humble yourself to your colleagues, and to the situation."

Observed differences in affect regulation. High scoring individuals who identified their feelings were more often able to utilize these insights towards optimal management solutions that allowed them to avoid ineffective or even harmful reactions to presenting problems. In contrast, participants who scored low on affect regulation within the current sample did not express any labeling or management of feelings. They were additionally more likely to describe actions that were reactive or appeared disingenuous, "I apologized [...] which I probably wasn't sorry I sent it, but that's how I reacted." In these examples, participants did not describe the feelings that guided their responses, and made no reference to trying to curb or manage such reactions.

Reflective Practices. A third component identified in the interviews involved participant ability to reflect about their own capacities, and that of others, including skills or biases, while responding to a problem. Expression of these reflective practices ranged from specific actions such as walking away from a problem in order to more analytically process it to more reasoning-based strategies such as information gathering or assessment of one's personal abilities. For

66

example, recognizing the limitations of one's own abilities may lead to appropriately seeking help to address a problem.

Taking pause. More than half of participants recalled taking some form of separation from the presenting problem in order to gain clarity or objectivity. Some individuals framed this as a necessary step in order to calm down, while others referenced taking pause as a common personal practice when facing stressful situations. After being disrespected by a co-worker and friend, one participant recalled thinking, "I could actually argue it out with you right now or I'm just going to walk away. Which I did. And when I calmed down a little bit I came back and talked to her about it." This participant showed both an ability to separate himself from a situation where emotions were running high and also recognized the need to address it at a later point once emotions were under control. Rather than using this pause specifically to mitigate unproductive or negative feelings, such as with affect management, taking pause as a form of reflection was specifically utilized in order to gain clarity about the particular situation. The act itself was thus less about self-care or preservation, than it was to specifically think about the problem and how to most effectively address it after returning.

Self-reflection. Self-reflection was demonstrated through an awareness of one's own capabilities, skills, resources, biases or limitations and how they may inform the way presenting problems were approached. Codes were assigned when participants recalled practicing self-reflection in real time as the problem was unfolding. For instance, one participant described a situation where a third-party had informed her that a co-worker and friend was upset about something that transpired between them. She reflected on the challenge, stating,

I tend to want to fix right away, to preserve things, and this wasn't an opportunity. This wasn't the right thing to fix immediately and I had to sit and soften a bit. Um, which for

me is difficult because instead of being passive about something I tend to say, let's just talk it through.

In this case, her self-reflection allowed for her to be cognizant of her own predisposition, and avoid reacting in a way that, although not directly negative, could have harmed the friendship.

Participants' self-reflection was also noted in post-hoc instances, which described general tendencies in relation to the unfolding situation. For example, in discussing a problem that left her feeling out of control, one participant recognized that this was particularly challenging because she considers herself "definitely the type of person, a leader... I'd much rather kind of like, grab the reigns than follow." In this example, the participant is not describing a specific reflection she had at the time of the event, but rather, is generally discussing an insight that in hindsight she believes influenced her experience of the dilemma.

Relevant information gathering. An integral component to addressing problems involved tailoring solutions to the unique qualities of the situation. To this end, a majority of participants acknowledged the need to incorporate context-specific information into their analysis of a problem and subsequent response. That is, in order to understand the problem fully and realistically, participants sought information that was distinct to the situation in order to inform their responses in relevant ways. For example, sometimes participants *did not* actively respond to a problem because they felt it was uniquely out of their control, as one participant describes, "I didn't really say anything more because that older person is kind of authoritative; I'm kind of like subordinate to him. So I didn't say anything." In other instances, participants who were aware of potential limits to their own knowledge or skills used these insights to seek out information they believed would help support their problem solving. For instance, one participant who felt she was blindsided during a meeting about a client's dissatisfaction with her

work, shared that she "went back through all the work we had done and was like trying to identify places where we may have done that and then like trying to patch things up." From this experience she learned about the particulars of what this specific client expects, which allowed her to be better prepared to answer such concerns and questions from this client in the future and avoid similar problems. Relevant information gathering, in this way, is distinct from simply seeking outside advice, in that it is done with the intention to gather an understanding of the problem that is situation-specific. Participants who utilized this were looking for information about the particulars of the presenting problem, or other involved individuals. These insights enhanced their ability address the problem in relevant ways. Participants were often very perceptive of the unique personality traits of others involved with a problem, and adjusted their behaviors based on this information. For example, one participant described how she dealt with a difficult a co-worker:

Difficult in that she has very strong views and will not back down for them. And you are either with her or you're out. And so I needed to, I thought I had to be very careful in my first interactions with her [...] to gain her respect and trust, as well as get the best product for [COMPANY] because we- I need to work with her.

Here, the unique qualities of the co-worker are considered in light of the larger goal of working together long-term as the speaker goes on to consider how to navigate the problem in a way that does not place her on the "outside" with the other individual.

Observed differences in reflective practices. Although almost all the participants in the study expressed self-reflection to a certain extent, there was a great deal of variability in the quality of these reflections. In contrast to somebody who was able to clearly identify their own abilities or biases and how they informed their ability to respond to a problem, those who scored

lower reflected in more removed ways. For example, after recognizing a specific frustration one participant had with a co-worker, she stated, "I don't know if it was [my feelings] were preconceived or if it's true." She recognizes that she might have a bias, but is unable to identify where this bias comes from or how it influenced her responses in dealing with the particular co-worker. Additionally, there was less prioritization of taking pause or separation from the presenting problem, as exemplified by one participant who described his immediate reaction to a problem as, "I definitely threw a big stink about it."

Tolerance of Ambiguity. Participants who presented as tolerant of ambiguity were able to recognize and accept the uncertain, impermanent, or variant nature of a presenting problem and its solution. This included ways that a problem may evolve over time, as well as various frames through which they could view the problem. An understanding of such ambiguity supported a holistic view of an unfolding dilemma and facilitated flexibility in navigating events and incorporating information as it presented itself over time. In the context of a solution, participants who demonstrated such tolerance were able to pinpoint their broadly desired outcome, while noting how unpredictable circumstances could influence the situation over time.

Acceptance of impermanence. Most directly, tolerance for ambiguity presented as a recognition that qualities of a problem were likely to change over time or that solutions may not be definitive. For example, many individuals noted that even though their dilemma had been resolved, they anticipated the underlying impact of the discord to cause problems in the future. As one participant shared regarding a problem involving an interpersonal relationship:

I'm not sure I can ever have that relationship with the other client because there's, there's obviously some distrust there, so I'm not sure if I can build that back. I mean I feel like

she still respects me professionally and for the work I do, but I feel like that [situation] will always be there.

Similarly, some individuals recognized possible solutions to a presenting problem, but noted that such solutions were not realistic or feasible right away. In discussing an ideal outcome to a problem resulting from having to scrap product materials, one participant posited that a solution is "coming in 10 years [...] there's been a lot of issues that are coming to a head and it's-- it will happen. I don't think it's going to happen quickly at all."

Recognition of Multiple frames. Several participants were able to view presenting problems through multiple frames. By demonstrating an understanding of how a problem can be viewed from different angles, participants were more likely to seek and apply relevant solutions tailored to desired outcomes. Common frames included viewing problems as reflecting organizational hierarchy, deviations from what was expected based on previous patterns, or as learning opportunities. For example, in describing a problem where new oversight was imposing expectations she did not agree with, one participant noted that the problem was challenging because:

It felt like a vote of no confidence. It felt like all of us, like I had kind of been given a lot of freedom to do work the way I wanted to do it and it was always with the understanding that like whatever works best for the project or whatever works best for the client, that's what we should do. We shouldn't be like super stuck in, 'we do it this way', and like if that way doesn't make sense well then make it make sense. That's--that's kind of never been the way I've worked.

By viewing the problem as one that reflected an unfamiliar or undesired approach to her work, rather than a personal attack, this participant was able to seek solutions that addressed the

broader context in which her duties were to be completed, such as speaking with a supervisor about shifting her specific role within the project.

Others described problems as learning opportunities, which uniquely shaped the way they sought solutions. One participant who was going to start supervising a challenging employee stated, "It was kind of a unique opportunity for me to start fresh, clean sheet of paper, no baggage, no, you know, history and kind of set that expectation the first day." Through this lens, the participate saw the challenge as one that could be overcome, rather than a burden by which he would need to remain in the status quo of having difficulties with this particular employee. Almost all employees utilized multiple frames to some extent in their viewing of problems, however, only a small portion of these participants additionally considered the problem a learning opportunity.

Purpose setting. An ability to view the problem from multiple frames and remain open to changing circumstances supported the development of clear, feasible, and relevant solutions to presenting problems. Participants who were able to identify a purpose or ideal resolution were uniquely capable of seeing how different approaches may be more or less effective at reaching their desired goals. Some participants were able to set objectives, such as wanting to maintain a good relationship, "I have a good relationship with my boss [...] She's not thrown me under the bus ever. So I really want to make sure that I support her too." Others, however, discussed how their desired outcome may not be feasible, such as one participant who wanted to address an interpersonal problem head on, but realized that this might actually dissuade the other person from communicating openly:

My desire was wanting to have the dialogue with a person and wanting to validate what they were thinking and feeling and to make that person aware that the lines of communication are open. But I, as I was working through it that probably would not have been the way it would've been received [...] where I was thinking that, that it would be an interactive dialogue it would, it probably would've come across to that individual as confronting.

By being able to identify a primary purpose, to keep communication open and maintain a positive relationship, this participant was able to assess how various actions, such as forcing a conversation prematurely, might work against her ultimate goal, and thus decided to wait until the other person approached her.

Observed differences in tolerance of ambiguity. Participants who exemplified this component demonstrated an ability to be direct about their objectives while maintaining flexibility and openness to change over time. In contrast, participants who scored lower on this component struggled to have clear objectives in their responses, relying on strategies such as "just waiting to see what happens," without clear motives or while others directly handled the problem. Others were able to recognize that there are different frames for problems, for example, "everybody's different, so you get approached differently," without highlighting how specific differences related to their experience. Additionally, individuals who were low in tolerance of ambiguity did not seek to problem solve across different possibilities or uncertainties. As one participant stated, "I had to come up with actions to prevent that from happening again. I came up with some that I don't believe are very sustainable but that's okay." Rather than discussing how the uncertainty of an unsustainable solution may impact her approach, she left the problem unresolved, while describing lingering unhappiness.

Systems Thinking. Systems thinking was demonstrated by participants who integrated contextual elements of a presenting problem and weighed multiple considerations in pursuit of

an optimal solution. It encapsulated many of the other previously identified practical wisdom strategies such as a holistic analysis of the problem, context-specific, personal beliefs, and the role of emotion in guiding or hindering the problem and resolution. Systems thinking not only utilized these elements, but integrated them towards a response supportive of a greater good or optimal outcome. For example, while participants may discuss various potential resolutions or ways a problem can unfold, someone who displays systems thinking will be able to use this information, through reasoning and reflection, in order to decide on an optimal solution to pursue. The main elements involved in systems thinking among the present sample included perspective taking, consideration of how the problem or solution may impact the organization on multiple levels, and a prioritization of a solution beyond self-interest.

Perspective taking. Perspective taking allowed participants to consider how others may be impacted by the presenting problem or possible solutions. For example, one participant who was asked to prove beyond standard protocol the quality of her work on a project, acknowledged why these extra requests by her co-worker may be warranted, "And she's, and rightly so, she's very concerned about, you know putting a product out there that a customer, you know, a customer can have confidence in." Even though these requests were beyond the scope of her role as a developer, she was able to understand the need as one reflecting her co-worker's different role in the project. Several participants were also able to apply perspective taking towards affording others the benefit of the doubt. For example, in discussing a hurtful email, one participant recalled, "I guess I tried to keep an open mind and not make assumptions about the real meaning behind that email even though it was tough and I want to respond back you know something equally rude." By giving others the benefit of the doubt, participants were able to step outside of their personal feelings, which could make them defensive or emotionally charged, and

consider the problem from the perspective of others.

Systems-level impact. Participants drew on systems-level thinking by acknowledging how the problem they were experiencing and solutions they were considering might impact various organizational levels. For example, some participants acknowledged how objectives may differ based on department-level goals:

So my responsibility is to ensure that we are making a quality product for our customers, and we can make it to specification. That's very important for our manufacturing capability. And then marketing, of course, wants pro-good quality product for customers, and R&D has a very vested interest because they've created the design.

Understanding these different needs and goals prepared individuals for selecting responses that reflected the varying needs of different stakeholders. Other participants further acknowledged how effective functioning at a team or department level could further the mission of the larger organization. A participant who made a personal error that was challenging to deal with looked back on the situation as a learning moment, but also considered how the experience shaped the way she views her role within the larger organization:

Really look at the bigger picture and how what I'm doing is affecting other groups and [COMPANY] as a whole, I would say. And I continue to do this job once a month, so it's very, it's very relevant. So the things that happened then I'm still thinking about today as I perform this task.

Pursuit of a greater good. Some participants specifically referenced a desire to reach solutions that would support the interests of others. Often times this involved finding solutions that would allow for a compromise between those involved. One employee stated, "I'm a newer person so trying to make sure they're understanding that we're a team [...] so just trying to make

sure working with them I look like I'm a teammate and trying to do what's best for us." More broadly, some participants were able to connect these ideal outcomes back to the company mission:

It's not about me, I'm doing the work but it's not about me it's about the organization's mission and how to convey what our mission is or what our activities are. So that was a good lesson in kind of getting the ego kind of beaten a little bit just to like, okay yeah that kind of hurts and then allowing it to begin to dissipate a little bit.

This broader perspective which supported a greater good allowed the participant to step back and not let her response to a problem take away from her bigger objective of responding in ways that did not interfere with quality output in support of the company overall.

Observed differences in systems thinking. The differences most evident between higher and lower scoring participants on the dimension of systems thinking were related to the depth of complexity with which participants reasoned through the problems they discussed. While higher scoring participants were able to consider more perspectives and potential points of impact in relation to a problem, lower scoring participants tended to maintain a single linear thought process as they reasoned about a problem or attempted to generate a solution. Often, this emerged as individuals concluding that a solution was not attainable. For example, one employee described the unpleasant context following an experienced conflict as, "Well this is now just a condition of working here." Others described responses they acknowledged as personally undesirable, were the roles reversed, such as going directly to a supervisor without addressing a problem directly with the other person involved. Such examples were underscored by a lack of perspective taking of others, or limited consideration of how one's actions can have broader impacts, such as for a work team or larger branch of the organization.

The PARTS Model of Practical Wisdom

The general themes that emerged when participants discussed how they handled difficult problems in the workplace were broadly categorized into the practical wisdom components of pragmatics of life, affect regulation, reflective practice, tolerance of ambiguity, and systems thinking. Together, they form what the present study refers to as the PARTS Model of Practical Wisdom (see Figure 2). Each component of the model reflects broad characteristics associated with practical wisdom in existing literature. However, the unique elements within each component are drawn specifically from the strategies and active processes the current sample described utilizing in the context of responding to dilemmas in the workplace. In this way, the PARTS Model bridges together current conceptualizations of practical wisdom with practical and applicable behaviors. The circular nature of the model reflects the nonlinear order in which most participants utilized the components of practical wisdom. The highest scoring participants were generally able to utilize a greater portion of these elements, and often in connection with one another. In contrast, low scoring participants often focused on one or two elements without considering how other pieces of information or new strategies might inform their response.

Given that practical wisdom necessitates tailored solutions to unique challenges, there is no inherent value that prioritizes one component over another in terms of utility (Baltes & Staudinger, 2000; Kramer, 2000). It is likely that different elements or components of this model may be more or less useful depending on the situation-specific characteristics of a dilemma. While each component can be utilized in isolation, some lend themselves better to application in conjunction with others. For instance, by first acknowledging multiple frames through which to view a dilemma, participants were in a better position to choose a strategy more likely to support a greater good. Individuals who self-reflected on their own limits and biases were more likely to seek out the support of others. If someone was more comfortable with ambiguity, taking pause from a situation did not seem as daunting. It also created an inherent trust that effective solutions could be achieved if sufficient time and thought were applied. In practice, the components of practical wisdom, although supportive of one another, exist as related elements available as dilemmas unfold.



Figure 2. PARTS Model of Practical Wisdom in the Workplace.

Application of the PARTS Model. Although the components of the PARTS model were discussed in light of their distinct elements, individuals typically relied on several of these elements in conjunction with others. Participants responded in non-linear ways, often utilizing one approach or drawing from one thought process, only to return at a later point. Additionally, all participants utilized the elements of the PARTS model to some degree, with the greatest distinctions observed in the quality and depth of the application of these strategies. A coding

rubric that allowed for rating each wisdom component, as well as determining an overall practical wisdom interview score, provided an initial attempt to quantify typically complex and variable approaches for responding to complexity.

Descriptive analyses were conducted using MAXQDA in order to examine the frequency of observed components of practical wisdom as well as how they varied by demographic characteristics of the current sample (VERBI Software, 2017). The average participant described 29.58 instances of utilizing elements fro the PARTS model, with the individual range between 10 to 65 occurrences. There was variation across the average use of each practical wisdom component: reflective practice (M = 8.96), tolerance of ambiguity (M = 7.92), systems thinking (M = 4.96), pragmatics of life (M = 4.58), and affect regulation (M = 3.13).

Additionally, there were differences in how often components were utilized across particular participant characteristics. Cross tabulations with demographics revealed that women were more likely to utilize the components of the PARTS model on average. Younger participants engaged in affect management more often than their older counterparts. Participants who had worked at the organization longer were more likely to practice reflection and systems thinking, whereas newer employees, perhaps as a function of age, discussed affect and ambiguity more often. Participants who reported at least some exposure to emotional social intelligence training provided by the organization relied on affect regulation, reflective practice and systems thinking to a greater extent than their counterparts, who drew more on pragmatics of life and tolerance of ambiguity. Thus, participation in such activities may support the utilization of some practical wisdom strategies in the workplace. Table 3 compares means across demographics. Independent-samples t-tests did not yield significant mean differences between demographic groups. However, this may be a reflection of the limited sample size.

Table 3

			Age	Age	Years	Years	ESI	ESI
Element	Female	Male	Younger*	Older	Low**	High	Yes	No
Pragmatics of Life	5.2	4.0	3.9	5.3	4.6	4.6	4.5	4.7
Affect Regulation	3.9	2.3	4.0	2.3	3.3	2.8	3.7	2.2
Reflective Practice	10.4	7.5	8.0	10.0	8.8	9.3	9.5	8.0
Tolerance of	8.3	7.5	6.8	9.1	8.1	7.6	7.7	8.3
Ambiguity								
Systems Thinking	5.6	4.3	3.8	6.1	4.9	5.0	5.1	4.8

Average observances of each element of the PARTS Model across demographics.

* Older/younger reflects above/below mean age of 41.13 years

** High/low reflects years of employment at current organization longer/shorter than mean of 5.72 years

Group Differences. A primary question of the present study was to understand meaningful differences in the emergence of practical wisdom in the workplace based on individual scores on practical wisdom as assessed by an existing self-report measure, the SD-WISE (Thomas et al., 2017). Below, comparisons are presented between the high and low scoring SD-WISE subgroups on the types of problems typically discussed, follow-up responses, and overall use of and score on the PARTS model.

Participants in the top quartile of practical wisdom were much more likely to discuss problems that were interpersonal in nature (66.7%) than their counterparts who scored in the lower quartile (25%). Differences were additionally observed between high and low scoring groups in response to the three follow-up questions. These questions asked participants to describe how they might advise a friend to respond to a problem similar to the one they had discussed, explain any lessons they had learned from the experience, and define the guiding purpose of the work they do. The higher scoring group was more likely to advise people to act in the same way (75%) they had if confronted with a similar problem, as opposed to lower scoring participants (50%). Both groups had similar rates of individuals who agreed that the experienced dilemma had changed the way they view their work (66%). However, of those that agreed, higher scoring participants were more likely (88%) than their lower scoring counterparts (63%), to report a positive change, such as having learned from the experience. Participants who reported a negative change often described developing a new antipathy for the company or specific individuals involved in the dilemma.

Participants in the high practical wisdom group were more likely to define their purpose at work and in their career as one that was personal in nature (75%), compared with those in the lower quartile (33%). Those who defined a personal purpose often focused on wanting to learn new skills, complete their job tasks effectively, or advance in their career. Although this appears misaligned with the generally prosocial nature of practical wisdom, consideration of how current behavior may contribute to longer-term purpose could be an indication of enhanced systems thinking. This top quartile subgroup was the only one that mentioned having a purpose in support of broader company goals or missions. In contrast, those from the lower quartile were more likely to consider the world-wide impact of their work (42%), as well as the relationships with co-workers (33%), than their higher scoring counterparts (17% and 8%, respectively). For example, a desire to support their teammates and have positive relationships in the workplace was a purpose referenced more often within the lower scoring subgroup.

In addition to subgroups derived from SD-WISE scores, coding of the interviews yielded a score for each participant ranging from (1) *Low* to (3) *High* on overall practical wisdom and each of the five components of the PARTS model. In order to explore whether the SD-WISE scores were related to the overall practical wisdom interview mean ratings, the measures are compared in Table 4 below. The average ratings for overall practical wisdom and each PARTS component were higher among individuals scoring in the top quartile on the SD-WISE. However, independent t-tests between these groups were not significantly different. This may be

a reflection of the small sample size.

Table 4

Mean scores* of the application of the PARTS model, distinguished between SD-WISE scores.

	Mean Score (SD)					
	Overall Sample	High SD-WISE	Low SD-WISE			
PARTS Model	(N=24)	Sub-Group (N=12)	Sub-Group (N=12)			
Overall Practical Wisdom	1.92 (.88)	2.17 (.94)	1.67 (.79)			
Pragmatics of Life	1.96 (.81)	2.17 (.94)	1.75 (.62)			
Affect Regulation	1.75 (.85)	2.00 (.95)	1.50 (.67)			
Reflective Practices	1.96 (.91)	2.42 (.79)	1.50 (.80)			
Tolerance of Ambiguity	2.13 (.61)	2.33 (.65)	1.92 (.51)			
Systems Thinking	1.96 (.91)	2.17 (.83)	1.75 (.97)			

*Scores range from (1) Low to (3) High.

Discussion

The present study sought to understand how individuals facing complex problems in the workplace utilize practical wisdom. A working definition of practical wisdom, conceptualized from existing literature, informed the coding and analysis of interviews within the current sample. Practical wisdom, the ability to take thoughtful, intentional and ethical action in response to important, difficult, or uncertain situations, touches on both the reflective and applied nature of wise action (Baltes & Staudinger, 2000; Sternberg, 2004). That is, individuals who are both able to thoughtfully reason about a problem *and* ethically act in response to that problem are more likely to be considered wise (Bangen et al., 2013; Kramer, 2000; Sternberg, 2004). Commonly expressed themes among the current sample reflect this notion. Further, the study sought to bridge currently distinct approaches for examining practical wisdom, namely self-report and interviews recalling strategies used in responding to complex dilemmas. A newly developed measure of practical wisdom, the SD-WISE (Thomas et al., 2017), was used to screen participants into two subgroups representing the highest and lowest quartiles. Reasoning

strategies and common themes among interview responses were evaluated in light of group membership.

Contextualizing the PARTS Model

The consolidation of observed themes across interviews in the current sample yielded five main components to practical wisdom: pragmatics of life, affect regulation, reflective practice, tolerance of ambiguity, and systems thinking. Together, these components are summarized in the PARTS model of practical wisdom, with each component reflecting three main elements used by participants to reason through and respond to the dilemmas they experienced in the workplace. The five main components of the PARTS model generally align with research on the main tenants of wise action. In their review of existing wisdom literature, Bangen et al. (2013), note that even across variable definitions and conceptualizations, existing literature converges on prosocial attitudes, decision-making, self-reflection, tolerance, and emotional balance as key elements of wise action. These points of overlap were supported in the five main components of the PARTS model, which highlights the need to gather information, set goals, exhibit flexibility in thought, and consider the perspectives of and impacts on others, as problems are resolved.

The role of thinking, feeling, and acting as necessary for wise action is well documented (Ardelt, 2004; Grossmann, 2017; Schwartz & Sharpe, 2006). Conceptualizations of practical wisdom emphasize the need for such adaptability, particularly as frameworks underscore multiple contributors to wise action. For example, Intezari and Pauleen (2013) reference acquiring relevant information, judging multiple options, and actively responding to dilemmas as steps towards high-quality problem resolution. These cognitive, affective, and behavioral components underscore the need to gather and wrestle with context-specific insights,

information, and personal values in order to pursue a best course of action. Likewise, the PARTS model, derived from examples of real time decision-making, highlights the multidimensional qualities of wise action. Cognitive reasoning about dilemmas is exemplified through the consideration of experiences, beliefs, and variable outcomes as evidenced across the pragmatics of life and tolerance of ambiguity components in the PARTS model. Affect regulation and reflective practice represent the more intuitive and emotional counterbalance to such reasoning. Together, these components contribute to worthwhile action in the service of achieving a greater good through behaviors such as perspective taking and systems thinking. Below, each of the components is discussed individually, with particular attention on the translation of these qualities to the workplace setting.

Often associated with life knowledge and the ability to give good advice, pragmatics of life are a cornerstone of practical wisdom (Baltes & Staudinger, 2000; Bangen et al., 2013). It plays a key role in the Berlin Wisdom Paradigm, which conceives of wisdom as an expert type of knowledge that supports effectively dealing with life matters (Baltes & Smith, 2008; Baltes & Staudinger, 2000; Glück & Baltes, 2006). In the present study, participants utilized this component through acknowledgement of their values and beliefs in relation to a presenting problem, seeking the support of others, and drawing on past experiences. These strategies offered a generalized demarcation within which problems were understood or resolved. For example, previous negative experiences with rushing solutions served as a metric for what responses may be more or less effective in addressing current dilemmas. Actions that did not fit within these experience-informed understandings were less desirable or overlooked all together. Several participants in the current sample noted their general belief that others were not out to get them. This broad consideration provided a backdrop for the other information and considerations they

drew on as problems unfolded. Experience-informed advice and personal worldviews provide general outlines for how events are expected to unfold or which solutions are likely to be desirable long-term. The workplace is a natural setting for the emergence of these understandings given that organizations have missions and values intended to communicate a shared vision to employees (Kopaneva & Sias, 2015). Increasingly, employees are seeking companies whose values align with their own, a congruence that promotes well-being, job satisfaction and ethical decision-making (Gagnon & Michael, 2003; Kopaneva & Sias, 2015). The present study additionally suggests that values serve as a point of reference when employees are faced with complex challenges. Through social interactions, team meetings, and employee supervision, a shared knowledge can develop to inform wise action. For example, participatory action that allows for groups to share their experiences and challenges promotes a workplace culture of curiosity and learning while supporting positive outlooks and enhanced problem framing (Novotny et al., 2016; Roholt & Rana, 2011).

While pragmatic thinking offers general boundaries within which wise responses are considered, affect adds an important personalization to the analytical processes involved with choosing courses of action (Brief & Weiss, 2002; Intezar & Pauleen, 2018). Affect regulation, demonstrated through informed intuition, and effective labeling and management of feelings, provides an emotional counterbalance to the other more pragmatic elements of wise decision-making. Reasoning processes are necessary as individuals navigate several decisions where desires, outcomes, and needs must be weighed against on another. Recognizing and effectively managing feelings provides the intuitive element necessary for connecting external decisions to internal states that shape how people feel about the choices they make (Intezari & Pauleen, 2018). Emotional intelligence literature notes that both recognition and management of feelings

are necessary for positive behavioral outcomes (Brackett, Rivers & Salovey, 2011). Findings from organizational psychology further indicate that employees with greater emotional intelligence are more likely to develop higher quality solutions to workplace problems (Herman & Scherer, 2008). In the workplace, recognition of emotion can allow employees to be intentional about dealing with situations. Specifically, and as many participants in the present study noted, effective management of emotions helped employees hold off prematurely addressing a problem and potentially escalating conflict. At the same time it allowed them to process and acknowledge their own feelings. This is akin to the nonjudgmental acceptance central to mindfulness practice, which is associated with wise decision-making (Vich, 2015; Weick & Putnam, 2006).

Affect regulation is closely linked to reflection, with positive moods shown to support the relationship between intuition and selection of optimal outcomes among expert organizational leaders (Chaffey, Unsworth & Fossey, 2012). Reflective practice emphasizes the importance of awareness and acknowledgement of a presenting problem and its unique qualities. In this sample, participants who drew on this dimension took time away from situations that were emotionally charged, engaged in active self-reflection, and sought context-specific information throughout the reasoning process. Modern understandings of the decision-making process support the inclusion of emotional factors in addition to more analytic approaches, noting that balance between the two is optimal (Intezari, 2016). Such balance between affect and analysis is often referred to as intuition, informed by feelings and guided by facts (Intezari, 2016; Sadler-Smith, Hodgkinson & Sinclair, 2008). Indeed, empirical findings show experts to be better at making good decisions than non-experts within a similar field, a pattern thought to emerge from experts' reliance on self-cultivation (Swartwood, 2013). By drawing on past experiences, in conjunction

with intuitive understandings about a problem, experts are better able to identify patterns in causes and effects related to complex challenges. These patterns inform the way experts refine their behaviors and choices over time. Reflection thus serves as a mechanism for becoming attuned to the unique elements of a presenting problem, and consolidating this information in the service of effective solutions. In the PARTS model, reflection included both the consideration of one's own capacities as well as the context-specific information needed to address presenting problems in a relevant way.

In the present study, tolerance for ambiguity included judicious acknowledgement of uncertainty, as well as consideration of various frames and possible outcomes. Several conceptualizations of practical wisdom reference the need to accept uncertainty (Baltes & Staudinger, 2000; Bangen et al., 2013). This is particularly salient given that complex and unpredictable situations are likely to necessitate wise action, as opposed to more straightforward or simple problems (Schwartz, 2011). Lay descriptors of wisdom often involve quality judgment as an indicator of wisdom; with applied research suggesting that experts are both able to consider a greater number of possible solutions and more effectively pursue optimal ones (Browne & Green, 2006). An ability to remain flexible and open thus supports development of wise solutions by allowing space for adaptation, ultimately leading to responsiveness as problems evolve. This is highly relevant in the modern workplace, which is characterized by unpredictability and novelty (Sadler-Smith et al., 2008). Rather than shying away from such ambiguity, employees prepared to make decisions in the context of uncertainty may be more successful in their roles.

Finally, systems thinking referred to actions that supported a holistic approach towards responding to identified challenges. This often involved the use of perspective taking and

consideration of a greater good. Research suggests that wise individuals consider a greater number of perspectives when reasoning through problems, and are able to generate more potential solutions to pursue (Grossmann & Kross, 2014; Larson & Walker, 2010). Rather than analyzing problems from various viewpoints, lower quality responses in the present sample remained at the surface level, often resulting in participants complaining or judging the situation and other individuals involved. Incorporating various perspectives into the reasoning process may be one mechanism for promoting a social good inherent to conceptualizations of wisdom. Practical wisdom, which is associated with prosocial behavior, can serve to promote virtuous goals within the corporate setting. Through consideration of multiple perspectives, participants were better able to see the systems-level impacts of their decisions. This can have spillover effect into both employee well-being and organizational success through the resolution of challenges in ways that account for impacts across organizational levels and that seek compromise (Grossmann, Gerlich & Denissen, 2016).

Research suggests that environmental context can inform the way people make meaning out of their experienced challenges, fostering opportunities for growth and development, especially in the workplace (Fichter, 2018). Moral will, consistently referenced as integral to wise action, can broadly be considered as a bridging of personal, interpersonal, and contextual interests (Sternberg, 2004). Organizations often espouse this sentiment through establishing ethical guidelines for employees (Ruiz-Palomino, Martínez-Cañas & Pozo-Rubio, 2012). Specific consideration of a code of ethics was absent from responses among the current sample. However, participants who scored high in practical wisdom were more likely to seek solutions that would yield benefits beyond their own self-interest. This prioritization of prosocial outcomes, or a greater good, is highlighted in the PARTS model as an extension of ethical or virtuous will. This may, in part, reflect a tendency for employees to view problems in the workplace from a solutions-focused perspective, rather than a more general ethical quandary (Fitcher, 2018). Participants in the present sample did not frame problems as moral dilemmas calling for ethical action. Instead, they focused on the elements of a problem that could directly lead to a solution, such as an interpersonal problem that necessitated consideration of how a coworker might perceive their actions. Additionally, Ruiz-Palomino et al. (2012) note that in organizational contexts where employees perceive fairness, they seek to uphold organizational well-being, rather than work towards mitigating unethical workplace qualities. Given the institutional investment of the study site to support employee well-being and development, ethical considerations may indeed be guided by this overarching desire to support a greater good as understood through company goals and missions. The majority of research on ethical decision-making in the workplace has focused on the role of leadership in creating a culture that supports ethical behavior, however, practical wisdom may offer a useful lens for more direct examination of individualized qualities supporting such behavior across organizational levels. Direct challenges to individually held beliefs about what is right are thought to contribute to shifts in value-driven behavior (Igarashi, Levenson & Aldwin, 2018). Efforts to build workplace habits grounded in moral virtue may promote employee consideration of a greater good when faced with dilemmas (Schwartz, 2011). In this way, contexts such as the workplace, where individuals are consistently experiencing novel challenges, working collaboratively with others, and engaging in personal development may play an integral role in shaping the promotion of practical wisdom over time (Fitcher, 2018).

In addition to a parallel between the components of the PARTS model and existing literature on practical wisdom, research on wise decision-making aligns with findings from the present study demonstrating that participants regularly utilized several components, often jumping back and forth between different elements. All participants utilized each element to some extent, with meaningful differences observed in the quality and depth of use. Higher quality responses were distinct in their capacity for bridging ideas together to inform actions and solutions. Such a tailored approach is the focus of recent attempts to unify the analytical and intuitive contributors to our decision-making processes (Kahneman, 2011). Decision science has addressed this duality by suggesting that in practice, the extent to which individuals require either intuition or analytics in the context of a particular situation informs the number of cues that inform their reasoning process. That is, in situations requiring more analysis, individuals will look for more details or context-specific information than in situations where feelings or beliefs are more central. Decision science suggests that individuals are consistently adjusting the number of cues they utilize in their reasoning process based on how salient intuition or analytics are to a presenting problem (Curley, Maclean, Murray & Laybourn, 2018). As such, wise individuals may be better at accurately deciding, perhaps through reflection on their own capacities or past experiences, what contributes to an optimal balance (Swartwood, 2013).

Additionally, participants varied in the frequency with which they drew on distinct elements of the PARTS model. The most often utilized elements were within the components of reflective practice and tolerance of ambiguity, expressed through context-specific information gathering, self-reflection, separating from a situation as needed, viewing the problem from multiple frames, remaining open and tolerant of uncertainties, and identifying a clear purpose or optimal outcome. This suggests that flexibility in one's thinking and the capacity for selfreflection may be mutually supportive in contributing to the emergence of practical wisdom. For instance, reflective practices can often provide the information, insights, or space necessary to consider a problem more holistically. This may, in turn, support realistic purpose setting that takes into account the many sides of a problem.

Affect regulation appeared to be the least utilized strategy within the current sample. This may, in part, reflect the nature of the interview exercise during which participants recounted past experiences that had mostly been resolved at the time of the interview. Focusing on specific actions they took, such as asking a co-worker for help, may have taken precedence in their recollection of the event. In contrast, recalling potentially fleeting emotions that occurred in real time could have been considered less relevant in participants' recounting. Individuals who referred to their emotions throughout the problem solving process reported that they had to find ways to manage very extreme emotions. Future research may want to directly inquire about the feelings individuals experience at various points of a dilemma to better understand how affect, even in its milder expressions, impacts real time problem solving.

Within the current sample, women, newer employees, and employees who had participated in emotional social intelligence (ESI) programming used components of the PARTS model more frequently. Some studies have suggested that women's propensity for prosocial engagement and socioemotional intelligence can support practical wisdom, although findings on gender differences remain mixed (Aldwin, 2009; Ardelt, 2009). However, the differences observed among participants who participated in ESI training suggest that staff development centered on strategies related to practical wisdom may be an effective tool for promoting wise action. It was unexpected to see younger individuals utilizing the PARTS components at higher rates, but some research suggests that familiarity and routine can dull the use of practices such as seeking out new information or perspectives (Schwartz, 2011). Participants who have worked at an organization longer might feel more confident in their ability to directly address problems without engaging in as many thought strategies as newer employees still forging relationships or learning organizational processes. Finally, although older participants used some components of the PARTS model more frequently, younger participants relied on affect regulation to a greater extent. Given recent emphasis on socioemotional intelligence in educational and employment settings, younger generations entering the workplace may be more familiar with the language and practices surrounding emotional management than employees who have spent significant parts of their life in workplaces that did not necessarily encourage the development of these skills (Zeidner, Matthews & Roberts, 2004). As organizations continue to become more multigenerational, understanding differences in how individuals of varying ages think about and approach problems may be particularly salient (Njoroge & Yazdanifard, 2014).

Group differences. A primary focus of the present study was to explore how practical wisdom manifests itself in response to actual dilemmas within the workplace. To examine this, analyses compared two subgroups within the sample, whose scores on the SD-WISE were either in the top or bottom quartile. Both groups had comparable demographics. Participants from the higher scoring quartile were more likely to discuss problems that were interpersonal in nature, suggesting greater attention to the relational aspects of workplace dilemmas among this subgroup. Indeed, researchers have noted that individuals capable of distancing from their own egos during problem-solving are more likely to reach wise outcomes (Grossmann, 2017). The higher scoring subgroup additionally described their overall purpose as personal or career oriented, often prioritizing opportunities to learn new skills or advance in their field. This is counter to what might be expected, given the emphasis on prosocial behavior often associated with practical wisdom (Sternberg, 2004). However, it may be this personal desire to advance that drives wise individuals to be more cognizant of their role in the larger context of a company

within which they hope to advance, ultimately leading to more cooperative solutions. Indeed, it was only the higher scoring subgroup which mentioned consideration of the company mission when describing their purpose, reinforcing the significance of systems thinking for informing wise action (Intezari & Pauleen, 2018; Small & Kupisk, 2015). Participants from the lowerscoring quartile did not consider the company mission as often, but they were more likely to emphasize the global impacts of their work. Additionally, they cited relationships with coworkers as a top priority in solving challenging dilemmas, a relational consideration central to wise action. However, it may be the consideration of relationships within a systems context, as opposed to solely between individuals, which supports greater practical wisdom. Rather than focusing on positive relationships for their own sake, the ability of individuals from the higher scoring subgroup to consider relational impacts across systems can serve as a better metric for practical wisdom. Given that relationships were taken into account by both subgroups, staff development initiatives could consider placing relationships at the center of larger company goals as a way to harness the general desire employees have to maintain positive, sustainable relationships with co-workers. This may be particularly useful in supporting prosocial behaviors among individuals who do not necessarily identify a personal purpose such as company advancement, but who are driven by other motivators to promote a positive work environment.

Finally, there was some convergence between the standardized, self-report measure of practical wisdom (SD-WISE) used to screen participants into subgroups and the qualitative interview task. Such congruence was evidenced through both the substance of the PARTS model, as well as the ratings on the PARTS components across interviews. The 5 components of the PARTS model parallel several items measured by the SD-WISE, including emotional regulation, prosocial behaviors, and tolerance for divergent values (Thomas et al., 2017). The

higher average ratings across each component within the subsample of higher scoring participants on the SD-WISE suggests that there may be overlap in capturing practical wisdom between in situ behaviors and the self-report measure. Despite limitations to self-report measures more generally, and a lack of statistical significance in mean differences in the present study, these speculative findings suggest the value of further exploring convergence between quick assessment tools for self-reported wisdom and wise decision-making in practice.

Both the SD-WISE and qualitative interviews provide unique measures of practical wisdom. The former reflects general beliefs about one's characteristics while the latter provides actual examples of behavioral capacity. For example, an individual who believes they are compassionate, could, in practice, show limited ability to understand the perspective of someone with whom they disagree. Such discrepancies can have important implications for how practical wisdom is assessed in applied contexts. In this way, interviews serve as an important check on the information gleaned from empirical measures. However, information shared in interviews is not all encompassing, and indeed may be subject to biases common to self-report measures, making initial findings from the present study only an exploratory step towards achieving a more holistic measurement of practical wisdom in action.

Limitations

The present findings should be considered in light of a few significant limitations, beginning with limited generalizability. Interviews with 24 participants allowed us to reach a point of saturation among responses, but the sample was fairly homogenous in terms of race/ethnicity and education level, despite reflecting broader company demographics and geographic location. All data were collected from a single organization already investing in promoting socioemotional intelligence among employees. Given the exploratory nature of the present study, drawing from an "enlightened" organization that prioritizes socioemotional development enhanced the ability to draw out topics of interest. However, this does prevent inferring more broadly about what practical wisdom looks like within different types of organizations or company cultures. Moreover, because the sample originated from a single organization, possible concern over anonymity could have contributed to omission of relevant details by participants. Consent forms and preliminary introduction to the study outlined procedures for aggregating all findings, including removal of identifying information and protection of data. However, some problems discussed by participants were so specific or well known throughout the organization that details about either the problem or solution could identify the individual being interviewed. As a result, some participants may have avoided describing where they sought support within the organization or how they navigated the different organizational barriers contributing to the problems they experienced. Likewise, participants could have omitted personal opinions or actions they took in order to avoid sharing information that reflected negatively on themselves, others, or the organization. Such limitations may be curbed in future studies by comparing different organizations that are more diverse in company culture, employee demographics, and general interest in staff development practices. Online questionnaires rather than in-person interviews may add an extra layer of anonymity some employees require for full transparency.

There was significant variability in the types of problems that participants shared. While every effort was made to focus interview questions and subsequent analyses on the broader thinking processes or reasoning strategies, it is important to note that different types of problems may require distinct responses that are more or less reflective of practical wisdom. That is, some problems discussed, though challenging to the participant at the time they occurred, were more straightforward than other examples. For instance, one participant discussed feeling frustrated about a co-worker who broke a rule. She described broader feelings of concern related to this, but the problem itself was inherently less complex than other examples where individuals were trying to juggle various personalities, multiple goals, or systemic issues. Although the components contributing to practical wisdom can serve individuals across a range of problem types, comparing responses across a uniform set of challenges may provide additional insights from which future studies can explore individual differences in wise reasoning. One way this has been achieved in previous studies is through the use of hypothetical scenarios, whereby participants are asked to reason through the same complex dilemma. However, this approach can have its own limits, such as preventing inference about what individuals do in actual practice.

Finally, comparing real life examples and self-report measures provides a more detailed way to consider how ideas or beliefs about handling problems unfold in real time. However, these relationships may be attenuated by several factors. Although participants in the top scoring quartile on the SD-WISE received higher scores on the PARTS model on average, there were some instances where the inverse relationship was observed and the lower-scoring subgroup fared better. Research finds that wise individuals are often more humble, which could result in less favorable self-reporting among the most wise in the sample. Conversely, individuals low in practical wisdom may be overconfident in their abilities to the point of unrealistically reporting these capacities on a questionnaire. Further, the observed qualitative results may be skewed due to individuals may not always have an entirely accurate assessment of their own skills or capacities in responding to workplace challenges. Comparing self-reports to lived experience addresses this in part, but further strides can be made by additionally considering the use of

other-observations as potential points of comparison. The workplace is a particularly ripe area for such exploration, as observations by teammates or supervisors is a common practice within organizational settings for staff development.

Future Research and Application

Research. The current study serves as an important first step for understanding how practical wisdom emerges in response to workplace dilemmas. One of the remaining challenges is to better delineate which elements of practical wisdom employees are actually using, and to what extent, as they navigate challenges. To this end, future research should consider exploring the emergence of practical wisdom not only as a self-report or self-reflective exercise, but with the addition of other assessments to corroborate existing metrics. One such approach could compare responses recalled from personal experience to those discussed in a hypothetical problem-solving task or to observations made by others, such as a mentor or supervisor. These additions would allow for a more holistic understanding of how practical wisdom emerges in the workplace, as well as how personal assessments of practical wisdom compare to what takes place in real time.

Application in the workplace. Effective management of complex workplace problems through the application of practical wisdom has the potential to positively impact employee experiences at work, overall well-being, and company success. Organizations might consider developing programming that introduces elements of practical wisdom into company culture, or direct training to refine skills that support wise action. This includes teaching employees how to be more reflective, value-driven, and considerate of context-specific information when faced with dilemmas. Such practices may in turn be harnessed to promote problem framing, purpose setting, and perspective taking, while informing positive systems thinking. As evidenced with the current sample, employees who had participated in some company programming around the topics of socioemotional intelligence were more likely to utilize aspects of the PARTS model when confronted with workplace challenges. Such training may look different between organizations, but the broader thinking processes and strategies may nonetheless prove useful for supporting individuals in successfully navigating interpersonal and environmental workplace challenges in ways that promote staff engagement and satisfaction. Finally, given the importance of seeking outside support and alternative perspectives for practical wisdom, companies might consider providing opportunities for employees to share difficult problems they have encountered and how they resolved them (or would have better resolved them in hindsight), as a means to learning from one another and growing collective wisdom.

Conclusion

The present study extends previous research by identifying the components that contribute to practical wisdom in the workplace context. These strategies include drawing on pragmatics of life, affect management, reflective practice, tolerance for ambiguity, and systems thinking. Together, the components of the PARTS model parallel common conceptualizations of wise action, while suggesting that assessment of these qualities may be feasible within an organizational setting. Findings further indicate that there are key differences in the way that practical wisdom unfolds among distinct groups within the workplace, and that organizations may be able to develop practical wisdom among employees. While these findings are considered in light of significant limitations, there are several reasons organizations may benefit from incorporating practical wisdom into their culture. Leadership positions have largely served to inform existing workplace wisdom research, but the present study drew on a sample representative of several ranks and positions. Rather than a top-down approach where leaders exclusively hold the expertise and knowledge, an organization that supports all employees in the promotion of practical wisdom may enhance workplace efficiency and productivity as well as other benefits typically associated with wisdom such as prosocial behavior, positive mood, and a driving sense of purpose (Grossmann, Brienza & Bobocel, 2017; Zacher & Staudinger, 2018). Indeed, practical wisdom is inherently social; some of the main tenets involve seeking outside guidance, considering the perspectives of other, and understanding systemic impacts of behavior (Bangen et al., 2013; Baltes & Staudinger, 2000; Staudinger & Glück, 2011; Sternberg, 2004). These qualities, in turn, can enhance satisfaction and overall well-being of employees. Organizations that are staffed with employees who feel a sense of purpose, competency, and satisfaction, stand to bolster company success and social impact. At a time when individuals and organizations are more connected than ever, the systemic benefits of a wise company culture are a particularly relevant pursuit.

References

- Aldwin, C. M. (2009). Gender and wisdom: A brief overview. *Research in Human Development*, 6(1), 1-8. doi:10.1080/15427600902779347
- Ardelt, M. (2004). Wisdom as expert knowledge system: A critical review of a contemporary operationalization of an ancient concept. *Human Development*, 47(5), 257–285.
 doi:10.1159/000079154
- Ardelt, M. (2009). How similar are wise men and women? A comparison across two age cohorts. *Research in Human Development*, 6(1), 9-26. doi:10.1080/15427600902779354
- Ardelt, M. (2011). Wisdom, age, and well-being. In K. W. Schaie & S. L. Willis (Eds.), Handbook of the Psychology of Aging (pp. 279-291). London, UK: Elsevier. doi:10.1016/ 8978-0-12-380882-0.00018-8
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *The American Psychologist*, 55(1), 122–136. doi:10. 1037/0003-066X.55.1.122
- Baltes, P. B., & Smith, J. (2008). The fascination of wisdom: Its nature, ontogeny, and function. *Perspectives on Psychological Science*, *3*, 56–64. doi:10.1111/j.1745-6916.2008.00062.x
- Bangen, K. J., Meeks, T., & Jeste, D. V. (2013). Defining and assessing wisdom: A review of the literature. American Journal of Geriatric Psychiatry, 21(12), 1254-66. doi:10.1016/j.jagp. 2012.11.020

Bassett, C. (2005). Emergent wisdom: Living a life in widening circles. ReVision, 27, 6-11.

Brackett, M. A., Rivers, S. E., & Salovey, P. (2011). Emotional intelligence: Implications for personal, social, academic, and workplace success. *Social and Personality Psychology Compass*, 5(1), 88-103. doi:10.1111/j.1751-9004.2010.00334.x
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. Annual Review of Psychology, 53, 279-307. doi:10.1146/annurev.psych.53.100901.135156
- Brienza, J. P., Kung, F. Y. H., Santos, H. C., Bobocel, D. R., & Grossmann, I. (2017). Wisdom, bias, and balance: Toward a process-sensitive measurement of wisdom-related cognition. *Journal of personality and social psychology*. doi:10.1037/pspp0000171.supp
- Brown, S. C., & Greene, J. A. (2006). The wisdom development scale: Translating concept to the concrete. *Journal of College Student Development*, 47(1), 1-19.
- Campbell, J. L., Quincy, C., Osserman, J., & Pedersen, O. K. (2013). Coding in-depth semistructured interviews: Problems of unitization and intercoder reliability and agreement. *Sociological Methods & Research*, 42(3), 294-320. doi:10.1177/ 0049124113500475
- Cesário, F., & Chambel, M. J. (2017). Linking organizational commitment and work engagement to employee performance. *Knowledge and process management*, 24(2), 152-58. doi:10. 1002/kpm.1542
- Chaffey, L., Unsworth, C. A., & Fossey, E. (2012). Relationship between intuition and emotional intelligence in occupational therapists in mental health practice. *American Journal of Occupational Therapy*, 66(1), 88–96. doi:10.5014/ajot. 2012.001693
- Curley, L. J., MacLean, R., Murray, J., & Laybourn, P. (2018). Decision science: A new hope. *Psychological Reports*, 0(0), 1-23. doi:10.1177/0033294118797579
- Elfering, A., Gerbner, S., Semmer, N. K., & Kaiser-Freiburghaus, D. (2005). Chronic job stressors and job control: Effects on event-related coping success and well-being. *Journal* of Occupational and Organizational Psychology, 78, 237-52. doi:10.1348/ 096317905X40088

- Elkington, R., & Booysen, L. (2015). Innovative leadership as enabling function within organizations: A complex adaptive system approach. *Journal of Leadership Studies*, 9(3), 78-80. doi:10.1002/jls
- Fitcher, R. (2018). Do the right thing! Developing ethical behavior in financial institutions. Journal of Business Ethics, 151, 69-84. doi:10.1007/s10551-016-3275-7
- Gagnon M. A., & Michael J. H. (2003). Employee strategic alignment at a wood manufacturer:An exploratory analysis using lean manufacturing. *Forest Products Journal*, 53, 24-29.
- Glück, J., & Baltes, P. B. (2006). Using the concept of wisdom to enhance the expression of wisdom knowledge: Not the philosopher's dream but differential effects of developmental preparedness. *Psychology and Aging*, 21(4), 679-690. doi:10.1037/0882-7974.21.4.679
- Grossmann, I. (2017). Wisdom in context. *Perspectives on Psychological Science*, *12*(2), 233-57. doi:10.1177/1745691616672066
- Grossmann, I., Gerlach, T. M., & Denissen, J. J. A. (2016). Wise reasonings in the face of everyday life challenges. *Social Psychological and Personality Science*, 7(7), 611-622. doi:10.1177/1948550616652206
- Grossmann, I., & Kross, E. (2014). Exploring Solomon's Paradox: Self-distancing eliminates the self-other asymmetry in wise reasoning about close relationships in younger and older adults. *Psychological Science*, 25(8), 1-10. doi:10.1177/0956797614535400
- Grossmann, I., Brienza, J. P., & Bobocel, D. R. (2017). Wise deliberation sustains cooperation. *Nature Human Behavior*, 0061(1), 1-6. doi:10.1038/s41562-017-0061

Herman, A. E., & Scherer, L. L. (2008). The effect of emotional intelligence and cognitive

intelligence on the solutions generated to ill-structured problems (vol. 4). In W.J. Zerbe, C.E.J. Härtel & N.M. Ashkanasy (Eds.), *Research on Emotion in Organizations: Emotions, Ethics and Decision-Making* (pp. 57-82). WA, UK: Emerald Group.

- Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*, 1277-1288. doi:10.1177/1049732305276687
- Hurst, D. K. (2013). Practical wisdom: Reinventing organizations by rediscovering ourselves. *Management Research Review*, *36*(8), 759-66. doi:10.1108/MRR-11-2012-0256
- Igarashi, H., Levenson, M. R., & Aldwin, C. M. (2018). The development of wisdom: A social ecological approach. *Journals of Gerontology: Psychological Sciences*, 73(8), 1350-1358. doi:10.1093/geronb/gby002
- Imas, A. (2014). Working for the "warm glow": On the benefits and limits of prosocial incentives. *Journal of Public Economics*, 114, 14-18. doi:10.1016/j.jpubeco.2013.11.006
- Intezari, A., (2016). Practical wisdom through sustainability: A Meta-approach. In A. Habisch & R. Schmidpeter (Eds.), *Cultural roots of sustainable management: Practical wisdom and corporate social responsibility* (pp. 23-37). Switzerland: Springer.
- Intezari, A., & Pauleen, D. J. (2013). Students of wisdom: An integral meta-competencies theory of practical wisdom. In W. M. Küpers & D.J. Pauleen (Eds.), *Handbook of practical wisdom: Leadership, organization and integral business practice* (pp. 155-174).
 Aldershot: Gower.
- Intezari, A., & Pauleen, D. J. (2018). Conceptualizing wise management decision-making: A grounded theory approach. *Decision Sciences*, *49*(2), 335-400.
- Jeste, D. V., Ardelt, M., Blazer, D., Kraemer, H. C., Vaillant, G., & Meeks, T. W. (2010). Expert

Consensus on Characteristics of Wisdom: A Delphi Method Study. *The Gerontologist*, 50(5), 668–680. doi: 10.1093/geront/gnq022

Kahneman, D. (2011). *Thinking Fast and Slow*. New York, NY: Farrar, Straus and Giroux.

Koçak, O. E. (2016). How to enable thriving at work through organizational trust. Research in *Business & Social Science*, 5(4), 40-52. doi:10.20525/ijrbs.v5i4.580

Kopaneva, I., & Sias, P. M. (2015). Lost in translation: Employee and organizational constructions of mission and vision. *Management Communications Quarterly*, 29(3), 358-384. doi:10.1177/0893318915581648

- Kramer, D.A. (2000). Wisdom as a classical source of human strength: Conceptualization and empirical inquiry. *Journal of Social and Clinical Psychology*, *19*(1), 83-101.
- Kupisk, D. (2016). The role of practical wisdom in youth practice. Unpublished master's thesis,The University of Wisconsin-Madison, Madison, Wisconsin.
- Larson, R. W., & Walker, K. C. (2010). Dilemmas of practice: Challenges to program quality encountered by youth program leaders. *American Journal of Community Psychology*, 45, 338-49. doi:10.1007/s10464-010-9307-z
- Moore, G. (2015). Corporate character, corporate virtues. *Business Ethics: A European Review*, 24(2), S99-114. doi:0.1111/beer.12100
- Njoroge, C. N., & Yazdanifard, R. (2014). The impact of social and emotional intelligence on employee motivation in a multigenerational workplace. *International Journal of Information, Business and Management*, 6(4), 163-170.
- Nonaka, I. (2007, July-August). The knowledge-creating company. *Harvard Business Review*, 162-71.

Novotny, A., Foltz, M., Griner, T., McDonald, B., Parniawski, P., & Palmer, C. (2016). Keeping

the center: Leadership resilience through shared learning. *Nurse Leader*, *14*(2), 126-129. doi:10.1016/j.mnl.2015.11.009

- Park, N., & Peterson, C. (2009). Character strengths: Research and Practice. *Journal of College* and Character, 4, 1-10.
- Park, N., Peterson, C., & Seligman, M. E. P. (2004). Strengths of character and well-being. Journal of Social and Clinical Psychology, 23(5), 603-19.
- Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychosocial capital and supervisor support. *Journal of Organizational Behavior*, 35, 434-46. doi: 10.1002/job
- Prewitt, V. R. (2002). Wisdom in the workplace. *Performance Improvement Quarterly*, *15*(1), 84-98.
- Ramlall, S. J. (2008). Enhancing employee performance through positive organizational behavior. *Journal of Applied Social Psychology*, 38(6), 1580-1600. doi:10.1111/j. 15591816.2008.00360.x
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128(6), 934-960. doi:10.1037/0033-2909.128.6.934
- Roholt, R. V., & Rana, S. (2011). Improving community-based youth work: Evaluation of an action research approach. *Child & Youth Services*, 32(4), 317–335. doi:10.1080/0145935X.2011.639240
- Ruiz-Palomino, P., Martínez-Cañas, R., & Pozo-Rubio, R. D. (2012). Promoting ethics in the workplace: Why not reflect general organization justice? *International Business & Economics Research Journal*, 11(13), 1447-1454. doi:10.19030/iber.v11i13.7446

- Sadler-Smith, E., Hodgkinson, G. P., & Sinclair, M. (2008). A matter of feeling? The role of intuition in entrepreneurial decision-making and behavior (vol. 4). In W.J. Zerbe, C.E.J.
 Härtel & N.M. Ashkanasy (Eds.), *Research on Emotion in Organizations: Emotions, Ethics and Decision-Making* (pp. 35-56). WA, UK: Emerald Group.
- Schwartz, B. (2011). Practical wisdom and organizations. *Research in Organizational Behavior*, *31*, 3-23. doi:10.1016/j.riob.2011.09.001
- Schwartz, B., & Sharpe, K. E. (2006). Practical wisdom: Aristotle meets positive psychology. *Journal of Happiness Studies*, 7, 377-95. doi:10.1007/s10902-005-3651-y
- Schwarz, N., Kahneman, D., & Xu, J. (2009). Global and episodic reports of hedonic experience.
 In R. Belli, D. Alwin, & F. Stafford (Eds.), *Calendar and time diary: Methods in life course research* (pp. 156–174). Newbury Park, CA: Sage. doi:10.4135/9781412990295.
 d15
- Small, S. A., & Kupisk, D. (2015). Wisdom in practice. In M. Walcheski and J. Rienke (Eds.),
 Family Life Education: The Practice of Family Science (3rd ed., pp.17-26). Minneapolis:
 National Council on Family Relations.
- Snowden, D. F., & Boone, M. E. (2007, November). A leader's framework for decision making:Wise executives tailor their approach to fit the complexity of the circumstances they face.*Harvard Business Review*, 68-76.
- Spreitzer, G. M., & Porath, C. (2013). Self-determination as nutriment for thriving: Building an integrative model of human growth at work. In *M. Gagné (Ed.), Oxford handbook of* work engagement, motivation, and self-determination theory. New York, NY: Oxford University Press.

Statler, M. (2014). Developing wisdom in a business school? Critical reflections on pedagogical

practice. Management Learning, 45(4), 397-14. doi:10.1177/1350507614541198

- Staudinger, U. M., & Glück, J. (2011). Psychological wisdom research: commonalities and differences in a growing field. *Annual Review of Psychology*, 62, 215–241. doi: 10.1146/ annurev.psych.121208.131659
- Sternberg, R. J. (2004). What is wisdom and how can we develop It? Annals of the American Academy of Political and Social Science, 591(1), 164–174. doi :0.1177/ 0002716203260097
- Swartwood, J. D. (2013). Wisdom as an expert skill. *Ethic Theory on Moral Practical*, *16*, 511-528. doi:10.1007/s10677-012-9367-2
- Thomas, M. L., Bangen, K. J., Palmer, B. W., Martin, A. S., Avanzino, J. A., Depp, C. A., Glorioso, D., Daly, R. E., & Jeste, D. V. (2017). A new scale for assessing wisdom based on common domains and a neurobiological model: The San-Diego Wisdom Scale (SD-WISE). *Journal of Psychiatric Research*. doi:10.1016/j.jpsychires.2017.09.005
- Thun, B., & Kelloway, E. K. (2011). Virtuous leaders: Assessing character strengths in the workplace. *Canadian Journal of Administrative Sciences*, 28, 270-83. doi:10.1002/ CJAS.216
- VERBI Software (2017). MAXQDA Analytics Pro [Computer Programme]. Berlin: Germany: VERBI.
- Vich, M. (2015). The emerging role of mindfulness research in the workplace and its challenges. *Central European Business Review*, 4(3), 35-47.
- Weick, K. E., & Putnam, T. (2006). Organizing for mindfulness: Eastern wisdom and western knowledge. *Journal of Management Inquiry*, 15(3), 275-287. doi:10.1177/ 1056492606291202

- Zacher, H., & Staudinger, U. M. (2018). Wisdom and well-being. In E. Diener, S. Oishi & L. Tay (Eds.), *Handbook of Well-Being*. Noba Scholar Handbook series: Subjective wellbeing. Salt Lake City, UT: DEF publishers. doi:nobascholar.com
- Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology: An International Review*, 53(3), 371-399. doi:10. 1111/j.1464-0597.2004.00176.x
- Zhou, Q., Hirst, G., & Shipton, H. (2012). Promoting creativity at work: The role of problemsolving demand. *Applied Psychology: An International Review*, 61(1), 56-80. doi:10. 1111/j.1464-0597.2011.00455.x

Chapter 4

Conclusion

Practical wisdom has long been revered as an optimal human capacity informing quality judgment and exceptional handling of life matters (Baltes & Staudinger, 2000; Bachmann, Sasse & Habisch, 2018; Sternberg, 2004). In recent years this otherwise ethereal concept has driven research towards exploring how to best utilize wise action in response to modern dilemmas. The reemergence of practical wisdom as a mechanism for excellence in decision-making, problem solving, and living the 'good life' has coincided with a number of concerning trends observed across individual and organizational well-being (Yang, 2013).

The breadth and scope of common problems today are increasingly complex, often necessitating novel and intricate solutions (Dalal & Paulen, 2018; Intezari & Pauleen, 2019). Despite economic growth and increased connectivity over the last couple of decades, adults and young people alike are reporting much lower rates of life satisfaction and mental-health, as well as increased loneliness (Tweng, 2019). Although practical wisdom is an emerging field, the majority of research thus far has remained theoretical or has focused on how wisdom is defined and measured.. Given the many positive characteristics associated with practical wisdom, future research would benefit from understanding how these qualities associate with improved health and well-being more generally. For example, a capacity to exhibit practical wisdom in order to more effectively manage difficult problems in one's life may promote a greater sense of purpose, or limit stress and anxiety associated with uncertainty or strained relationships.

Likewise, organizations may stand to benefit from such a framework, particularly at a time when they face increasingly greater public distrust, while simultaneously struggling to retain employees who feel satisfied and engaged at work (Rooney & McKenna, 2007). Several

key elements to practical wisdom, including purpose setting and prosocial behavior, are associated with well-being more generally (Weinstein & Ryan, 2010; Zimmerman, 2006). Moreover, if practical wisdom contributes to desirable problem-solving, it follows that individuals who feel capable of effectively tackling the challenges in their life while remaining connected to others are likely to be more successful (Ryan & Deci, 2000; Bachmann et al., 2018). Indeed, consolidation of values and goal-directed behavior is associated with improved performance and well-being (Ryan & Deci, 2000). The present studies explored important factors contributing to practical wisdom, as well as the ways it manifests in the workplace.

Study 1 explored specific correlates between practical wisdom and behavior, cognition and character. Self-control and several key character strengths, including love, curiosity, and fairness were positively related to increased, self-reported practical wisdom. This supports the notion that intentional behavior and goal setting, coupled with a desire to achieve positive ends is supportive of practical wisdom (Schwartz, 2011). A negative effect was observed with socioemotional intelligence. Although unexpected, as a measurement of ability to read emotions, socioemotional intelligence in this study may not have adequately assessed the ability for individuals to effectively utilize these observations in the decision-making process. A cornerstone to practical wisdom is the convergence of reflective reasoning skills alongside the will to act virtuously, making it a particularly desirable alternative in contexts seeking to combat unethical behavior, such as the workplace (Bachmann et al., 2018). Importantly for the application of practical wisdom, these two metrics may work together in relevant ways. Schweitzer, Ordòñez and Douma (2004) found that unethical behavior was more common among individuals with unmet goals, especially in the context of rewards associated with success. Workplaces may thus benefit from considering how to select for or infuse employee conduct with strategies that promote wise action in times of uncertainty.

Study 2 expanded on the benefits to be reaped from wise action in the workplace, as participants who scored higher on practical wisdom were more likely to consider interpersonal qualities to presenting dilemmas and the systemic impact of their responses. Additionally, the highly wise group was more likely to utilize components associated with practical wisdom. Based on convergence between existing literature and examples of individual approaches for resolving complex dilemmas within the workplace, the PARTS model encompasses pragmatics of life, affect management, reflective practice, tolerance of ambiguity, and systems thinking. Together these components reinforce the prosocial, reflective, and willful qualities of practical wisdom. Through the consideration of situation-specific details and the experiences and skills of the self and others, practical wisdom in the workplace among the sample supported solutions that considered other perspectives and the greater whole of the organization when dealing with dilemmas.

The relevance of practical wisdom to several components of organizational function, including human resource practices, company culture, and leadership has been recognized, although few specifics exist on how this can be promoted (Bachmann et al., 2018; Grossmann & Brienza, 2018). The modern workplace appears to be at a crossroads, where new ways of handling complexity and novelty are needed (Rooney & McKenna, 2007). Practical wisdom offers a potential framework that not only addresses quality decision-making and problem solving, but is also value-driven and prosocial. Effective management of dilemmas can improve individual well-being both directly, through a sense of accomplishment, and indirectly through more general satisfaction with the organization and its values (Barakat, Isabella, Boaventura & Mazzon, 2016; Kunzmann, 2004). Attempts to harness employee skills with key character strengths may serve as a springboard for moral and judicious workplace behavior, with practices such as reflection, purpose setting, and perspective taking further supporting prosocial ends. In the pioneering attempts to ground practical wisdom in the business world, social practical wisdom theory emphasizes the role of cognition and emotions to inform fluid thinking and applications of virtues towards prosocial ends that support sustained positive culture (Intezari & Pauleen, 2019; Rooney, McKenna & Liesch, 2010). The workplace in particular may be well suited for promoting such strategies, given the inherent development and growth associated with successful employment. Learning from others, reflecting on one's own skills, and thinking systemically are natural extensions of working in a collective setting. As our workplaces become more interconnected, and our desire to find meaningful purpose from our daily activities grows, practical wisdom offers a reflexive framework for developing capacities to support these ends.

- Bachmann, C., Sasse, L., & Habisch, A. (2018). Applying the practical wisdom lenses in decision-making: An integrative approach to humanistic management. *Humanist Management Journal*, 2(2), 125-150. doi:10.1007/s41463-017-0026-6
- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *The American Psychologist*, 55(1), 122–136. doi:10. 1037/0003-066X.55.1.122
- Barakat, S. R., Isabella, G., Boaventura, J. M. G., & Mazzon, J. A. (2016). The influence of corporate social responsibility on employee satisfaction. *Management Decision*, 54(9), 2325-2339. doi:10.1108/MD-05-2016-0308
- Dalal, N., & Pauleen, D. J. (2018). The wisdom nexus: Guiding information systems research, practice, and education. *Information Systems Journal*, 29, 224-244. doi:10.1111/isj.12196
- Grossmann, I., & Brienza, J. P. (2018). The strengths of wisdom provide unique contributions to improved leadership, sustainability, inequality, gross national happiness, and civic discourse in the face of contemporary world problems. *Journal of Intelligence*, 6(22), 1-17. doi:10.3390/jintelligence6020022
- Intezari, A., & Pauleen, D. (2019). Wisdom, analytics and wicked problems: Integral decision making for the data age. London: Routledge.
- Kunzmann, A. (2004). Approaches to a good life: The emotional–motivational side to wisdom. *Positive Psychology in Practice, 31,* 504–517.
- Rooney, D., & McKenna, B. (2007). Wisdom in organizations: Whence and whither. *Social epistemology*, *21*(2), 113-138. doi:10.1080/02691720701393434

Rooney, D., McKenna, B., & Liesch, P. (2010). Wisdom and management in the knowledge

economy. New York: Routledge.

- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68-78. doi:10.1037/0003-066X.55.1.68
- Schwartz, B. (2011). Practical wisdom and organizations. *Research in Organizational Behavior*, *31*, 3-23. doi:10.1016/j.riob.2011.09.001
- Schweitzer, M. E., Ordóñez, L., & Douma, B. (2004). Goal setting as a motivator of unethical behavior. *The Academy of Management Journal*, 47(3), 422-432.
- Sternberg, R. J. (2004). What is wisdom and how can we develop It? Annals of the American Academy of Political and Social Science, 591(1), 164–174. doi:10.1177/ 0002716203260097
- Twenge, J. M. (2019). The sad state of happiness in the United States and the role of digital media. In *The World Happiness Report* (Chapter 5). Retrieved from: http://worldhappiness.report/ed/2019/the-sad-state-of-happiness-in-the-united-states-andthe-role-of-digital-media/
- Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology*, 98(2), 222-244. doi:10.1037/a0016984
- Yang, S. (2013). Wisdom and good lives: A process perspective. New Ideas in Psychology, 31, 194-201. doi:10.1016/j.newideapsych.2013.03.001

Zimmerman, B. J. (2006). Development and adaptation of expertise: The role of self-regulatory

processes and beliefs. In K. A. Ericsson, N. Charness, P.J. Feltovich, & R.R. Hoffman (Eds.), *The Cambridge Handbook of Expertise and Expert Performance* (pp. 705-722). New York, NY, US: Cambridge University Press. doi:10.1017/CBO9780511816796.039



PARTICIPATE IN A UW-RESEARCH STUDY

We want to learn more about personal qualities that contribute to problem solving, particularly in the workplace. Consider participating in a short study about common experiences at work and the approaches you use for tackling daily challenges.

What will you have to do? Complete an online survey lasting approx. 30-45 minutes, with the possibility to be selected for an optional 20-30 minute follow-up interview (if interested).

What do you get in return? Receive a personalized, confidential report of your character strengths, which can be used to explore ways to maximize your effectiveness in the workplace or personal life. Additionally, your participation will count as a self-reflective exercise on MBOs.

All participants who complete the survey <u>by June 15th</u> will be eligible to win a catered lunch for themselves and up to 8 coworkers,

where you'll receive **\$400** to donate to a cause of your choice.

Where does the study take place? Completion of study can be done on company time. Surveys can be taken anywhere you feel comfortable. Interviews will take place at a private office on [COMPANY]'s campus (or at UW if you'd prefer).

Who is eligible? Anybody currently employed at [COMPANY], over the age of 21, and who has spent *at least* 2 years working in a professional setting.



Contact Dayana Kupisk at workwisdom@sohe.wisc.edu

APPENDIX B: Digital Informed Consent Form

Research Project Description and Statement of Informed Consent for the study: Understanding Employee Strengths and Styles

This project is looking for employees of [COMPANY] who are interested in participating in a short research study.

What is this project about?

For this project, we are interested in learning about how individuals think about solving problems in the workplace and the personal characteristics that may contribute to doing so effectively.

Who is conducting this project?

This project is being conducted by Dayana Kupisk, *M.S.*, Human Development and Family Studies Department, at the University of Wisconsin-Madison. The information from this study will be used for Ms. Kupisk's PhD dissertation.

What does this project involve?

If you choose to participate, you will be asked to complete a set of surveys online, expected to take between 30-45 minutes. These surveys will ask for basic background information, including your job history and current role, and then ask for you to rate your agreement with several statements related to how you think about problems and other personal qualities. After the survey is complete, you will be able to indicate your interest in being contacted again to complete a brief 20-30 minute in person interview at [COMPANY]. You will only be contacted again should you mark your interest in possibly completing an interview.

What are my rights as a participant?

Participation in this study is voluntary. You maintain the right to stop participation in the study at any time with no penalty or effect on employment. You maintain the right to skip any questions during the online survey.

Are there any risks to participating?

This study poses minimal risk. This project involves sharing personal and work-related information, and as such, one risk to participation is revealing personal, identifiable or sensitive information, which can heighten the risk of a confidentiality breach. In order to minimize this risk, your personal information will not be linked to any part of your surveys. This confidentiality will be maintained by assigning ID numbers to all surveys in place of names or other identifying information. Additionally, your responses to part of the survey will be sent to a research institute for scoring. All identifying information will be removed prior to this so as not to reveal any personal information of participants. Collected data may be used for future research, but no identifying information will be connected to stored data, and longer term storage will be maintained through secure campus computers and remain in a locked, safe laboratory space. [COMPANY] will not have access to any collected data, but will receive a summary report of findings.

Are there benefits to participating?

There are no direct benefits to participation. The information you provide will add to the knowledge we have about best practices dealing with challenging situations in the workplace. By learning more about such practices we hope to gain a better understanding of how to prepare employees for effectively tackling common challenges in the workplace.

Compensation

There is no monetary compensation for participating. If you participate before June 15th, you will be entered for a chance to win a catered lunch for you and up to 8 of your coworkers, during which time you will be awarded \$400.00 that you can decide to donate to a cause of your choice. Additionally, [COMPANY] has allowed those interested in participating to do so on company time and at the organization location. It has also been agreed upon with [COMPANY] that participants can cite participation in this study as a professional development activity towards their Management by Objective (MBO) reports. Finally, participants can chose to receive a character strengths profile, which provides them with a ranking of their most central character strengths after completing the survey questionnaires. This can be a useful tool for exploring personal and professional development and goals.

Contact Information

If you have any questions about this project, you can contact Dayana Kupisk at <u>kupisk@wisc.edu or Dr. Stephen Small at sasmall@wisc.edu</u>.

If you have questions about your rights as a research participant, you may contact the University of Wisconsin Education and Social/Behavioral Science IRB Office at (608) 263-2320.

How to get involved

If you are interested in participating in this study, you may click the link below:

(INSERT LINK)

By clicking this link you are indicating that you have read the information in this letter of informed-consent and are agreeing to participate in the study.

You may print a copy of this letter for your records if you wish.

119

APPENDIX C: Demographics Survey

Directions: Please answer the questions below either by selecting the appropriate answer or filling in with your own information.

Level of education (please select from the options below)

- (1) No schooling complete
- (2) K-8th grade complete
- (3) Some high school
- (4) High school or GED complete
- (5) Some college
- (6) Trade or vocational training certificate

... If choice 6-11, please indicate the certificate or degree focus/specialization/department:

What is your current job title?

What department are you a part of?

How many individuals are on your immediate team?

How many other teams do you work with on a regular basis?

What are your main responsibilities in your current position?

If yes...please list which ones...

How would you rate yourself in terms of your skills in your current professional field? Please circle a number.

1 2 3 4 (Novice)-----(Expert)

- (7) Associate degree
- (8) Bachelor's degree
- (9) Master's degree
- (10) Professional degree
- (11) Doctorate degree

APPENDIX D: Marlow-Crowne Social Desirability Scale (MC-1)

Directions: Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

I am always willing to admit when I make a mistake.	True	False
I always try to practice what I preach.	True	False
I never resent being asked to return a favor.	True	False
I have never been irked when people expressed ideas very different from my own.	True	False
I have never deliberately said something that hurt someone's feelings.	True	False
*I like to gossip at times.	True	False
*There have been occasions when I took advantage of someone.	True	False
*I sometimes try to get even rather than forgive and forget.	True	False
*At times I have really insisted on having things my own way.	True	False
*There have been occasions when I felt like smashing things.	True	False

*Indicates reverse item coding

APPENDIX E: The San Diego Wisdom Scale (SD-WISE)

· · · · · · · · · · · · · · · · · · ·	Strongly Di	sagree		Stro	ngly Agree
I am good at perceiving how others are feeling.	1	2	3	4	5
*I have trouble making decisions.	1	2	3	4	5
*I have a difficult time keeping	1	2	3	4	5
friendships.					
Others look to me to help them make	1	2	3	4	5
choices.					
*I avoid situations where I know my	1	2	3	4	5
help will be needed.					
*I have trouble thinking clearly when I	1	2	3	4	5
am upset.					
Others say I give good advice.	1	2	3	4	5
I usually make decisions in a timely	1	2	3	4	5
fashion.					
I remain calm under pressure.	1	2	3	4	5
I enjoy learning things about other	1	2	3	4	5
cultures.					
*I tend to postpone making major	1	2	3	4	5
decisions as long as I can.		_			-
I take time to reflect on my thoughts.	1	2	3	4	5
I would stop a stranger who dropped a	1	2	3	4	5
twenty-dollar bill to return it.		-	-		_
I am okay with others having morals and	1	2	3	4	5
values other than my own.	1	2	2		-
I am able to recover well from emotional	I	2	3	4	5
stress.	1	2	2	4	
*I avoid self-reflection.	1	2	3	4	5
*I would rather someone else make the	I	2	3	4	5
decision for me if I am uncertain.	1	2	2	4	5
I treat others the way I would like to be	1	2	3	4	3
treated.	1	2	2	1	5
it is important that I understand the	1	Z	3	4	3
L concerning loging compating from events	1	2	2	4	5
r generally learn something from every	1	Z	3	4	5
Laniov being exposed to diverse	1	2	2	1	5
vioupoints	1	2	5	4	5
*I don't analyze my own behavior	1	2	3	1	5
*I often don't know what to tell people	1	2	3	4	5
when they come to me for advice	1	2	5	-	5
*I cannot filter my negative emotions	1	2	3	Δ	5
r cannot much my negative emotions.	1	2	3	4	5

Directions: Please rate your level agreement to each of the statements below.

*Indicates reverse item coding

APPENDIX F: The Brief Self-Control Scale (BSCS)

	Not at all lil	ke me		Ve	ery like me
I am good at resisting temptation.	1	2	3	4	5
I have a hard time breaking habits.*	1	2	3	4	5
I am lazy.*	1	2	3	4	5
I say inappropriate things.*	1	2	3	4	5
I do certain things that are bad for me, if	1	2	3	4	5
they are fun.*					
I refuse things that are bad for me.	1	2	3	4	5
I wish I had more self discipline.*	1	2	3	4	5
People would say that I have iron self-	1	2	3	4	5
discipline.					
Pleasure and fun sometimes keep me	1	2	3	4	5
from getting my work done.*					
I have trouble concentrating.*	1	2	3	4	5
I am able to work effectively toward	1	2	3	4	5
long-term goals.					
Sometimes I can't stop myself from	1	2	3	4	5
doing something, even if I know it is					
wrong.*					
I often act without thinking through all	1	2	3	4	5
the alternatives.*					

Directions: Please rate to what extent each statement below describes you.

*Indicates reverse item coding

APPENDIX G: Reading the Mind's Eye Test (The Eyes Test)

Directions: Instructions: For each set of eyes, choose and circle which word best describes what the person in the picture is thinking or feeling. You may feel that more than one word is applicable but please choose just one word, the word which you consider to be most suitable. Before making your choice, make sure that you have read all 4 words. You should try to do the task as quickly as possible but you will not be timed. If you really don't know what a word means you can look it up in the definition handout.



- a. playful
- b. comforting
- c. irritated
- d. bored

APPENDIX H: The Santa Clara Brief Compassion Scale (SCBCS)

	Not at a True of	ll me					- Very true of me
When I hear about someone (a stranger) going through a difficult time, I feel a	1	2	3	4	5	6	7
I tend to feel compassion for people, even though I do not know them.	1	2	3	4	5	6	7
One of the activities that provide me with the most meaning to my life is helping others in the world when they need help.	1	2	3	4	5	6	7
I would rather engage in actions that help others, even though they are strangers, than engage in actions that would help me.	1	2	3	4	5	6	7
I often have tender feelings towards people (strangers) when they seem to be in need.	1	2	3	4	5	6	7

Directions: Please rate to what extent each statement below describes you.

APPENDIX I: Consent Form

Research Project Description and Statement of Informed Consent for the Employee Dilemma Study

This project is looking for employees of [COMPANY] who are interested in participating in a short research study.

What is this project about?

For this project, we are interested in learning about how individuals respond to challenging situations in the workplace.

Who is conducting this project?

This project is being conducted by Dayana Kupisk, *M.S.*, Human Development and Family Studies Department, at the University of Wisconsin-Madison. The information from this study will be used for Ms. Kupisk's PhD dissertation.

What does this project involve?

Participation in this study involves completing a questionnaire and brief interview, expected to last 20-30 minutes. During the interview, you will be asked to share with the researcher a difficult situation you recently encountered in the workplace that involved others and was particularly challenging, and share how you thought about and responded to the problem when it happened.

What are my rights as a participant?

Participation in this study is voluntary. You maintain the right to stop participation in the study at any time with no penalty or effect on employment. You maintain the right to skip any questions during the interview.

Are there any risks to participating?

This study poses minimal risk. We understand that this project involves sharing personal and work-related information, and as such, one risk to participation is revealing personal, identifiable or sensitive information when responding to interview questions. In order to minimize this risk, only first names will be used during the interview. Anything that is shared during the study will remain strictly confidential, and any identifying information that is revealed will only be transcribed using a first initial (e.g., if a client name is used, a pseudonym be will be transcribed in data). Your personal information will not be linked to any part of your questionnaire or interview. This confidentiality will be maintained by assigning ID numbers to all participants in place of names or other identifying information.

The interview portion of this study will be audio recorded. Risk associated with using technology to record and store interviews will be minimized by making sure that recordings are only available to trained members of the research lab team. No identifying information will be

connected with audio recordings. Interview spaces will be private and secure. Should you prefer to meet offsite, a private space is available on the University of Wisconsin campus for you, at no charge).

Collected data may be used for future research, but no identifying information will be connected to stored data, and longer term storage will be maintained through secure campus computer storage and remain in a locked, safe laboratory space. [COMPANY] will not have access to any collected data, but will receive a summary report of findings.

Are there benefits to participating?

There are no direct benefits to participation. The information you provide will add to the knowledge we have about best practices dealing with challenging situations in the workplace. By learning more about such practices we hope to gain a better understanding of how to prepare employees for effectively tackling common challenges in the workplace.

Compensation

As a thank you for your participation, at the conclusion of your interview you will receive \$25.00. You may choose to receive this payment as an online gift card to either Amazon.com or donorschoose.org. In order to receive this, you will need to provide your email below. Additionally, [COMPANY] has allowed those interested in participating to do so on company time and at the organization location. However, it is the responsibility of the participant to clear the interview time with their direct supervisor. Participants can also cite participation in the study towards their Management by Objective (MBO) reports.

Contact Information

If you have any questions about this project, you can contact Dayana Kupisk at kupisk@wisc.edu or Dr. Stephen Small at sasmall@wisc.edu .If you have questions about your rights as a research participant, you may contact the University of Wisconsin Education and Social/Behavioral Science IRB Office at (608) 263-2320.

Please write and sign your name below to indicate that you have read the information in this letter of informed-consent and are agreeing to participate in the study.

Name: _____

Signature	
JILIIIIUU	

Date: _____

APPENDIX J: Event Reconstruction

Direction: Please think about a difficult situation that you dealt with in the last year at your workplace. This should be a situation you were involved in, regardless of whether you initiated the situation, and one where other individuals were involved. Think of a situation you found particularly challenging or felt conflicted about when it happened, perhaps one where you were interacting with teams other than your own, there were barriers to getting proper support or there was a significant clash of priorities, needs, or beliefs. Now take a moment to recall the situation and visualize it in your mind; consider where you were when it happened, who was involved, and the feelings you experienced. Afterwards, please answer the questions below:

- 1. When did this situation first begin?
 - a. This week
 - b. Within the last month
 - c. Within the last 6 months
 - d. Within the last year
- 2. What day of the week was it?
 - a. Monday
 - b. Tuesday
 - c. Wednesday
 - d. Thursday
 - e. Friday
 - f. Saturday
 - g. Sunday
 - h. Don't remember
- 3. What time of day was it?
 - a. Morning
 - b. Afternoon
 - c. Evening
 - d. Don't remember
- 4. What were you doing when it happened? Please provide 1-2 sentences.

5. Where were you?

	Involved?		Same geno	ler as you?
Boss, supervisor, manager	YES	NO	YES	NO
Mentor	YES	NO	YES	NO
Trainer	YES	NO	YES	NO
Colleague or coworker	YES	NO	YES	NO
Subordinate	YES	NO	YES	NO
Mentee	YES	NO	YES	NO
Trainee or apprentice	YES	NO	YES	NO
Customer or apprentice	YES	NO	YES	NO
Customer or client	YES	NO	YES	NO
Supplier	YES	NO	YES	NO
Friend	YES	NO	YES	NO
Family	YES	NO	YES	NO
Other, describe:	YES	NO	YES	NO
Other, describe:	YES	NO	YES	NO
Other, describe:	YES	NO	YES	NO

6. Who was involved in this situation? Check any/all that apply – you may select more than one for any person involved. Of those involved, please indicate if they were the same gender as you.

7. As you were thinking about this situation, what thoughts came to your mind? Please write your thoughts or feelings below.

APPENDIX K: Wisdom Incident Solving Experience (WISE) INTERVIEW PROTOCOL

Hello, my name is [INTERVIEWER] and I will be conducting a brief interview with you today. First, thank you for agreeing to participate and for filling out the survey.

Time spent at work is extensive and can have broad reaching implications for our wellbeing and satisfaction. As a professional in your field, you have a unique perspective on the challenges that are common in your work. Today, I am interested in finding out more about these challenges and how you deal with them in real time when no clear, simple solutions are readily available. As a reminder, all information you share will be kept strictly confidential.

On the short survey you just completed, you were asked to recall a difficult workplace dilemma that you were involved in within the last year. Can you describe the situation you were thinking about to me now, including as much detail as possible that you believe to be relevant. If you want to address specific individuals, please only use first names, and remember that no identifying information will be linked back to our conversation.

Possible probes: Can you expand on...? Can you tell me more about...? Why is this important to the situation you're describing?

Thank you for sharing that experience with me. Now, I would like to hear about the actions you took to respond to this situation, as well as the thinking that informed these choices.

Possible probes: Can you expand on...? Can you tell me more about...? What was your thought process behind...? Why was ... and important consideration for you? What would you say you were trying to accomplish by doing/saying...?

Thank you for sharing more about this experience with me. I just have three brief followup questions for you.

- 1. Do you feel you have an overarching goal or purpose when it comes to doing your job?
- 2. If you knew a friend or co-worker who experienced a situation similar to the one you shared with me, how would you advise them to respond to it and why?
- 3. Did experiencing this situation change the way you think about your work?

Great. Thank you very much for sharing that experience and taking me through your approach in addressing what sounds like a very real challenge in your work. Your reflections on this experience will greatly contribute to our understanding of both the types of challenges faced within the workplace, as well as the ways in which such challenges are addressed in practice.

Do you have any questions before we wrap up?

APPENDIX L: Dimensions of Practical Wisdom Coding Rubric

The following pages outline the Practical Wisdom codes to be used in conjunction with interviews conducted for the *Understanding Employee Strengths and Styles* study.

The PARTS model of practical wisdom involves 5 dimensions thought to support practical wisdom including **p**ragmatics of life, **a**ffect regulation, **r**eflective practices, **t**olerance of ambiguity, and **s**ystems thinking.

General guidelines:

When coding for the PARTS of practical wisdom, <u>code each unique instance or example of a dimension.</u>

Since interviews are in and of themselves a reflective process, codes may be applied whether they are post-hoc or not. That is, a code may be applied in instances that are descriptive of how events unfolded at the time of the presenting problem, as well as new revelations or reflections that come up throughout the interview process. For example, both statements such as "*I knew that I was too emotional to deal with this person, so I took the afternoon off and sought some support from my partner,*" and "*If I were to do things differently, I would have talked to someone to help myself cool off before dealing with it*" could be coded as self-reflective.

Statements can have more than one code assigned to them.

While coding, please consider how you might rate the **<u>overall</u>** interview at its conclusion based on the following criteria:

Score of "1" indicates a <u>low practical wisdom score</u>, as exemplified by narrow thinking or limited strategies/reasoning processes in relation to solving the problem described. Participants with a score of 1 focus primarily on selfish goals or do not consider the impact of the problem from different perspectives or frames. They do not seek out information or context-specific observations to inform their actions, and show little insight into their own abilities to address the presenting problem or how their actions may impact others involved.

Score of "2" indicates a <u>moderate practical wisdom score</u>, as exemplified by some instances of perspective taking, self-reflection, or emotional management. The participant may describe multiple frames to the problem or is able to identify how different information may have influenced their reasoning of the problem. However, participants receiving this score show a limited ability to cohesively use their reflections or information towards a holistic, informed response that addressed the multilevel components of the problem discussed.

Score of "3" indicates a <u>high practical wisdom score</u>, as exemplified by participants who are able to view the problem from multiple angles, identify multilevel impacts of the problem and its solution, and effectively gather information or assess their own abilities to address the problem in a holistic way. Participants who receive this score are be able to pull these different insights together in order to come up with solutions that meet their needs while also identifying how to contribute a greater good, such as departmental climate or organizational success. The information and perspectives they rely on are not independent, but rather work together to assist them in addressing the problem as it unfolds.

Interview #					
Dimension of Practical W	isdom	1	Notes		
Pragmatics of Life	Draws on p metaphors from past of think about holistically	personal values, life , or lessons learned experiences in order to t a presenting problem 7.	1	2	3
Identifies personal beliefs or	values				
Seeks outside guidanc	e				
Draws on past experiences (o others)	f self or				
Affect Regulation	Is able to i manage fee presenting	dentify, discuss, or elings in relation to a problem.	1	2	3
Describes acting on intuition (e.g., informed reactions, reading room, etc.)					
Identifies feelings					
Describes actions taken to n feelings	nanage				
Reflective Practices	Describes how one's own capacities (e.g., skills, biases) a that of others can impact the presenting problem or solution particularly as it relates to cont specific information		1	2	3
Takes pause such as time/space away from situation					
Demonstrates self-reflection					
Relevant information gathering (e.g., noting context-specific information)					

Tolerance of Ambigu	ity	Ability to recognize the uncertain nature of a problem or solution, including differing ways a problem may be viewed or addressed in order to reach desired outcome		1	2	3
Accepts impermanence	of the	situation				
Identifies multiple frame problem	es for vi	ewing the				
Engages in purpose sett different ways these ou possible/fear	ing and itcomes sible	explores s may be				
Systems Thinking		Ability to integrate contextual elements of the presenting problem and weigh multiple considerations in pursuit of an optimal solution.		1	2	3
Perspective Taking (in others the benefit o	cluding f the do	g giving oubt)				
Identifies impact of the problem/solution on various different system levels (e.g., team, department, organization, etc.)						
Describes how a greater good or compromise was sought with the chosen response						
Overall Score Ranking from (1) Low to (3) High in practical wisdom; a general composite of how cohesively the participant utilized the dimensions listed above.		1	2	3		