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Cultivating Meaning at Work, in Four Movements

Yumi Kendall

University of Pennsylvania, yumikendall@gmail.com

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Cultivating Meaning at Work, in Four Movements

Abstract

This paper explores ways to enhance meaning at work for professional orchestra musicians, whose psychological needs include both the collective symphonic whole as well as individual mastery needs. An introduction to meaning and meaning in work is followed by a discussion of four pathways to enhance meaning at work for professional orchestra musicians. Finally, for each of the four pathways, initial interventions are proposed. In support of the research on meaning pathways and related psychological experiences of this population, a series of appendices review theoretical constructs from social science at the individual and group levels. Concluding the appendices is a discussion of social cognitive theory's view of agency, which bolsters individual and collective pathways for orchestra musicians to find or create meaning at work.

Keywords

meaning, orchestra musicians, self-determination theory, identity and distinctiveness, social cognitive theory, agency

Disciplines

Arts and Humanities | Music Performance | Psychology

Cultivating Meaning at Work, in Four Movements

Yumi Kendall

University of Pennsylvania

A Capstone Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Applied Positive Psychology

Advisor: Robert W. Rebele

August 1, 2017

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yumikendall@gmail.com

Capstone Project

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Table of Contents

Preamble	5
Introduction: Working in the American Professional Orchestra Field	6
Introduction: Meaning Research	8
Meaning at Work	8
Pathways to Meaning	9
Individuation; Discovery and use of Signature Strengths	10
Self-connection; Savoring	13
Contribution; Job crafting	16
Unification; High Quality Connections	19
Navigating the Pathways	21
Further Research on Meaning in Work	22
Conclusion	24
Appendices	26
Appendix A: Positive Psychology: A Brief Introduction to the Field	26
Appendix B: Context of the American Professional Orchestral Field	28
Appendix C: Supporting Theories and Supplemental Research	32
References	61

Preamble

The lights dim in the concert hall. The audience settles into their seats as they applaud the concertmaster walking onstage. The orchestra tunes; the conductor appears and acknowledges the audience as she proceeds to the podium, baton in hand. Meanwhile, a violinist – call her Sheila¹ – prepares for the performance of Tchaikovsky’s 5th symphony by mentally reviewing tonight’s performance: she plans to nail those fast passages in the fourth movement that she practiced so well earlier this week! Sheila is deeply engaged in her musical role in the orchestra: her violin part is like the ganache of a chocolate cake, rich and warm in texture. She loves adding to the lush sound of the strings, and she’s fully aware of her own voice amidst the whole symphony of sounds. On the other hand, Sheila reflects, she is also engaged in her off-stage role, and appreciates the chance to exert her own sense of agency in the orchestra’s educational initiatives. Mentally returning to the stage for the performance, Sheila prepares to be attentive to the conductor’s expressive commands, and anticipates connecting what the conductor rehearsed during the week to what will happen in the moment, in concert. She reflects that what happens musically tonight may not happen in exactly the same way in tomorrow’s concert; Sheila’s attentiveness to her own personal and the orchestra’s collective details elevates her own positive feelings in anticipation of the performance. As the conductor prepares, and then begins the performance, Sheila feels an upwelling of gratitude and pride rise in her as the sound of soft strings and gossamer clarinet breathe life onto the concert hall’s canvas of silence.

¹ The individuals portrayed in this preamble are composite characters intended to demonstrate distinct mentalities of agency in the workplace. Any connection to real-life individuals is a coincidence and completely unintentional on the author’s part.

Meanwhile, cellist Suzanne struggles to focus in performance. Like Sheila's violin studies, Suzanne took private lessons and practiced cello daily since kindergarten, and later with a well-known cello teacher during conservatory training. However, after winning her orchestra position and receiving tenure, Suzanne gradually felt her work interest diminish as she kept wondering why she practiced so hard for so many years when no one hears *her* anymore. What difference does she, an individual, make in an orchestra? Once the Tchaikovsky quietly begins, Suzanne wonders why, if they have to play so quietly, does it matter that she plays at all? Does it even matter if she practices any more on her own? She notices a momentary glitch in her fingering, too small for anyone but herself to notice. While Suzanne enjoys the collective sound of the orchestra and being a part of it, she remains unsure of her own contributions to it.

Introduction: Working in the American Professional Orchestra Field

Professional orchestral musicians face a conundrum, a psychological tension between the self and the group, between distinctiveness and belonging. An orchestra is a group of individual musicians who have each spent years mastering their own craft and now work collectively for a symphonic performance. At its best, the orchestral whole subsumes its individual voices; the individual knowingly and willfully contributes her voice to the group, such as Sheila's experience in the Tchaikovsky. Said differently, the individuals become a part of something larger than themselves. On the other hand, cultivating and maintaining individuality is essential to an orchestra's rich, complex, collective performance for the individual musician as well as the full orchestra. The same context and structure of professional symphony orchestras in the United States, however, can also be autonomy-diminishing, and can discourage individual motivation and artistic fulfillment. At its worst, the orchestra suppresses its individual voices, with the individual gradually and inadvertently losing her voice amongst the group, as happened to

Suzanne in the opening vignette. How might symphony orchestras strengthen and harmonize individual and collective voices?

This paper will address that question by focusing on the orchestra as a place of employment, and it will propose that finding and creating meaning in work can resolve these contrasting psychological experiences and contribute to career fulfillment for professional orchestra musicians. A typical professional orchestra comprises up to about one hundred unionized, tenured musicians², who are the focus of this paper. Musicians are divided into their respective instrument sections (woodwinds, brass, percussion, and strings, for example), and within each section, musician roles include principal leaders and core section musicians. The primary job responsibility for all musicians in the orchestra is concert performances of symphonic classical music, along with an expectation of individual personal practice in preparation for orchestra rehearsals and concerts. Other duties vary by orchestra culture, and may include organizational citizenship behaviors such as ambassadorship, service on orchestra committees, and fundraising and development efforts. Therefore, musicians' roles are both structured and unstructured, providing opportunities for cultivating meaning at work in these responsibilities.

To answer the question at its heart, this paper will begin with a review of recent research on the primary pathways to meaning, both in life generally and specifically at work. From there it will go into key ideas and practical applications for each of four common meaning pathways – individuation, self-connection, contribution, and unification. Finally, additional background

² Additionally, a typical professional orchestral organization consists of 1) a music director who conducts many or most concerts and oversees large-scale artistic vision for the orchestra, 2) management staff responsible for general operations, marketing and public relations, fundraising, artistic administration, production, and musician personnel, and 3) a board of directors, accountable for fiduciary obligations and fundraising, as well as ambassadorship for the organization. While all of these constituents are beyond the scope of this paper, Appendix B provides a basic outline of professional orchestras' structure.

research will be introduced briefly and then explored further in the appendices. First, though, it will start with perhaps the biggest question: What does it mean to lead a meaningful life?

Introduction: Meaning Research

Meaning is what makes humans uniquely human (Baumeister & Vohs, 2002). Finding and creating meaning adds immeasurably to the value of life, and recent research demonstrates that meaning in life has been associated with most physical, psychological, and social aspects of the human experience (Steger, n.d.). While meaning is unique to the human experience, people use the word “meaning” in myriad ways – “What does this mean?” “That was a meaningful experience.” “What’s the meaning of life?” Perhaps due to multiple uses of the word, scholars have recently endeavored to clarify what “meaning” really means. For Steger (n.d.), meaning in life is a component of healthy psychological well-being. For Baumeister and Vohs (2002), meaning brings stability to an ever-changing life: while the physical world constantly changes – people grow up, home environments transform, nature changes – meaning lends constancy and stability to human life. Kashdan and McKnight (2009), meanwhile, suggest that purpose in life is an essential component of meaning that acts as a foundation of personal identity, a life scheme that both unifies and directs intention. Events in the present elicit meaning when linked to future events (Baumeister & Vohs, 2002), like Sheila’s constant, purposeful search for mastery and connection in the concert hall. Purpose is like the engine that gives energy to meaning: purpose helps drive meaning in life.

Meaning at Work

While the psychologists above have focused on big questions about meaning in all domains of life, other scholars have focused their research on the pursuit of meaning and fulfillment at work. Numerous studies over the last two decades have studied professional

musicians' work lives, from psychological stress in performance (Holst, Paarup, & Baelum, 2012) and physical pain associated with work (Engquist, Ørbaek, & Jakobsson, 2004), to job satisfaction related to non-performance roles (Young, 2017), as well as job satisfaction as compared to other professions (Veltmer et al., 2012). Relevant to meaning in work specifically, research has found that most people fall into one of three categories of work orientation: a job, career, or calling (Wrzesniewski, 2003). A job is a task to make income, simply as a means to earn a wage, usually with little or no personal fulfillment. A career, while it may have some degree of fulfillment, is primarily pursued for future goals of promotion or advancement. A calling, however, is engaged in for its own sake, in which connection to a deep sense of self through work is a goal in itself. People who bring a calling orientation to their work often report greater well-being and enjoyment than those with other work orientations (Wrzesniewski, 2003). For Sheila, the violinist in the preamble, a calling orientation may help her derive well-being and satisfaction from her contribution to the group. On the other hand, cellist Suzanne's struggle with finding her own voice amidst the whole might stem from a career orientation that has struggled to find direction since she was granted tenure. Might altering her orientation to work help Suzanne find greater meaning in what she does? And more generally, what can any orchestral musician do to cultivate greater fulfillment in their work?

Pathways to Meaning

In their paper reviewing several decades of research on the subject, Rosso, Dekas, and Wrzesniewski (2010) propose a framework for identifying four common pathways to finding and maintaining meaning at work. Their framework looks first at the relationship of "other" (or group, such as the entire orchestra, other organizations, other individuals, or a higher power) to the "self" (or individual musician), and then at a dimension that runs between "agency" (skill

mastery, identity, and distinctiveness) and “communion” (connection with the self or others).

When these two dimensions combine, four pathways to meaning emerge:

Individuation (self + agency)

Self-connection (self + communion)

Contribution (others + agency)

Unification (others + communion)

If we return again to the story of Sheila in the opening preamble, we can see examples of all four of these pathways. Practicing a particularly challenging musical passage, for instance, is an example of individuation, whereas her awareness of herself amidst the group sound is a form of self-connection. Meanwhile, Sheila’s organizational citizenship work with education initiatives is a type of contribution, and her sense of musical connection with the whole orchestra creates an opportunity for unification. Sheila’s meaning in work arises from both agency and communion.

In the following sections, this paper will explore each of these four pathways to meaning in turn. Each pathway will be introduced by a short vignette intended to capture the way that pathway might be experienced by an orchestral musician, followed by a brief discussion of what that pathway represents. In addition, for each pathway a specific intervention drawn from the field of positive psychology is proposed. (See Appendix A for more on positive psychology).

Individuation (self + agency)

Finally, a chance to hear my violin, my voice, in center stage, in front of the orchestra! Up until last week’s concerts, I hadn’t yet had the chance to really discover how I’ve grown (or how much room I have to grow) artistically, and learning and performing the solo part of the concerto last week was both scary and eye-opening for me. Although I’m staying in shape

technically, it makes an enormous difference to have the pressure of being soloist to kick me into gear! Usually my voice is melded with everyone else's, and so it can be challenging to understand my personal growth, especially as a section string player. It was so exciting, quite nerve-wracking, and ultimately a highlight of my career to perform as soloist in front of the orchestra- I felt myself come alive in a new way.

One way that work can be made meaningful is through individuation, or those actions and experiences that make a person feel valuable and worthy (Rosso et al., 2010). In the above anecdote, an individual musician gets to step into the limelight and be highlighted within the orchestra collective. In so doing, his or her needs for skill mastery, distinctiveness, agency (the ability to take action), and self-esteem are all met despite normally having a group orientation. Each individual holds values, beliefs, and personal motivations that define meaning in work for that person (Rosso et al., 2010), and individuation is the pathway that attends to those unique needs.

Rosso and colleagues suggest that self-efficacy and self-esteem are two key elements of the individuation pathway. *Self-efficacy* is a perception of being able to use one's skills to effect desired change on one's environment. Here, self-efficacy emerges in the soloist's self-perception of being ready and able to step into the limelight. *Self-esteem* is a sense of self-worth, although not necessarily self-derived. Self-esteem can be molded and influenced by external circumstances, such as group experiences or personal accomplishments that are perceived as worthy efforts (Rosso et al., 2010). Here, being in the spotlight gives the soloist a sense of pride that fulfills his or her self-efficacy and self-esteem needs.

Discovery and use of signature strengths. As the soloist's vignette indicates, that opportunity to take center stage is a rare one for most orchestral musicians. So, what can they do

to follow the individuation pathway to meaning between turns in the spotlight? One option might be to discover and use their signature strengths.

Research from the Values In Action (VIA) Institute describes 24 universally valued character strengths and virtues that have correlations with meaning, achievement, and perception of work as a calling, along with many other desired life outcomes (Niemiec, 2013). Meaning is correlated with strengths of zest (energy in life), curiosity, religiousness, gratitude, and hope, for example; achievement is associated with perseverance, and a calling orientation is related to the strength of zest. Numerous studies suggest that learning and then applying one's signature strengths can be an effective positive intervention (Niemiec, 2013). Identifying personal strengths may enhance individual musicians' self-esteem, perceptions of and use of their skills, and may assist musicians in targeting the best use of their strengths in the orchestral organization. As just one example, serving on a committee or participating in education activities would be appropriately complementary activities for a musician with "social responsibility" and "teamwork" as signature strengths. A musician with "gratitude" as a signature strength may find fulfillment in working with development staff and generous patrons. Even for those musicians who choose to maintain solely their on-stage performance roles, learning about signature strengths can be empowering to the individual: strengths such as humor, zest, or teamwork may translate into personally relevant onstage behaviors and perceptions. In all of these examples, musicians can take action (agency) to bring the strengths that most uniquely define them (self) to their work in ways that enhance the experience for themselves and for those around them³.

³ The free survey is available at www.viasurvey.org.

Self-connection (self + communion)

It was an unexpectedly prompt early morning. The SS officers rounded up 105 inmates and marched them to ready-made open graves in the woods outside Budzyn labor camp. The firing squad started, and one by one, prisoners collapsed forward. Suddenly, Commandant Stockman yelled “Not prisoner 14088! He’s a violinist, and we need him.”

Chaim Arbatman, of Warsaw, Poland, was twelve years old when the Nazis came. As a toddler, he first heard the violin when he accompanied his father to the barbershop; at home, the music box played the sweet sounds of the violin. He wanted to play, and so his parents found him a teacher. By 12, he was advancing quickly.

When the Nazis invaded, Chaim, along with his parents, two sisters and brother, fled Warsaw until they reached a small village, where they hid until the Nazis found and arrested them in 1941. He never saw his parents again. When he arrived at Budzyn labor camp, he was assigned to commandant Stockman, a Polish Jew whose task was keeping order among the prisoners.

After his narrow escape from death, Chaim played violin for the SS officers and camp prisoners as they arrived. But perhaps most of all, he played for himself. In total, he endured five camps before liberation, at age 17. Later, after immigrating to the US and training at the Curtis Institute, David Arben, as he was now called, played with the Detroit Symphony and Cleveland Orchestra before joining the Philadelphia Orchestra in 1959. He remained there until his retirement in 1993. According to a current, long-time Philadelphia Orchestra musician who played for more than a decade with Arben, the violinist was a misanthropic colleague, occasionally escorted offstage before concerts due to his challenging outbursts against authority (conductors), and whose only solace was his violin. The violin saved his life, and as Arben would

say later in life: “violin is not my job; violin is my life. Music is life, music is hope, music is peace”.

This story, based on true events (P. Arnold, personal communication, July 8, 2017), demonstrates deep self-connection and meaning with oneself. Self-connection is a pathway to meaning that emerges when an individual can bring greater alignment between her self-perception and actions (Rosso et al., 2010). Here, research suggests *authenticity* as a key ingredient to meaning at work, when work is congruent with personal values and a true sense of self, including consonant behavior and overarching, meaningful connections to work. Arben’s sense of meaningful connection – “music is life, music is hope, music is peace” – reflects his experience with the authenticity of his work in the way that the music he plays connects directly with who he is and what he values.

Supporting an authentic pathway for meaning at work are two components: *identity affirmation*, when skills align with job requirements, or when work connects with one’s identity; and *personal engagement*, in which work activities that are internally motivated enhance meaning in work (Rosso et al., 2010). Both Arben’s identity as a violinist and his personal engagement in his work provide meaningful connections to his sense of self. Related research has focused on work centrality and job involvement (how significant to Arben is playing in the orchestra? How much time and effort does this work require?), as well as work orientations (for Arben, playing violin is a calling), as key antecedents of these components. Both significance of and orientation towards work influence the individual’s meaningful relationship to work. Arben’s work in orchestra is a significant and essential part of him, as well as a calling: he is drawn to music, as it saved his life. Thus, with authenticity in his calling, Arben experienced meaning in work through self-connection.

Savoring. If the chance to be a soloist is a relatively rare way to practice individuation, Arben's personal history that shaped his relationship to his career as a musician is utterly unique as an example of self-connection. Yet there are many ways that musicians might try to bring more alignment between their identities / values and their work. One such way to connect with oneself is savoring, a kind of appreciative attentiveness to one's experience.

Savoring is a process of emotional regulation that enhances a positive experience by dwelling on it in appreciative ways (Smith, Harrison, Kurtz, & Bryant, 2014). It is a source of well-being that may help counteract the adaptation musicians may experience from repetitive performance of even the greatest music (Emmons & McCullough, 2003). Savoring includes remembering the first performance of a given piece, connecting to the past; enjoying the present moment by savoring it in the present; or anticipating a future moment (Smith et al., 2014). Other types of savoring include: *basking* (receptivity to praise and congratulations, such as fully and graciously accepting applause at a performance's conclusion); *thanksgiving* (experiencing and sharing gratitude, such as Sheila's appreciativeness at the start of the concert); *marveling* (experiencing awe in something vast and larger than oneself, in performing a massive symphonic work with hundreds of musicians and singers, for instance); and *luxuriating* (fully engaging in pleasure and sensory experiences; complete immersion in the music) (Smith et al., 2014). One study also suggests that multiple savoring techniques, such as the above, may increase positive affect more than one strategy alone (Quoidbach, Berry, Hansenne, & Mikolajczak, 2010). Therefore, musicians may benefit from using a variety of savoring strategies to enhance self-connection in performance, which then ultimately may increase meaning at work.

Contribution (agency + others)

On Tuesday, December 28, 2010, in Ann Arbor, Michigan, on a dreary winter's day, my life's meaning deepened immeasurably. That day, I visited a 94-year-old man in hospice care. He was agitated and restless, rude with the nurses, and obstinately resisting a nap, which he usually took mid-day. He had become what in the past he'd sardonically called other people: a misanthropic curmudgeonly troglodyte. I brought my cello, intending to play for him, and, for old times' sake, have a lesson with him.

I grew up taking lessons with this man, who in the 1960s had introduced the Japanese Suzuki approach of music education to the Americas. He was the pioneer of the American Suzuki method. At age 5, my family started me on cello lessons using my aunt's pawnshop cello. Lessons and practice with this man would happen daily when my violinist brother and I visited him and his wife at their homestead in Edwardsville, IL. Daily, before going down to the pond to investigate crawdad holes, hoe potatoes, feed the chickens, or make a treasure hunt, we played for him. In other words, playing cello was just another part of a fulfilling childhood day at this couple's house during visits. As for the rest of the year? "Practice only on the days you eat," said Suzuki. In other words, I practiced every single day. That included lesson days, birthdays, holidays, illnesses, and snow days. No exceptions.

The year 2010 marked my sixth year as a cellist in the Philadelphia Orchestra. Deliberately practicing on the days I ate had paid off. Having established an annual tradition of receiving lessons with this man since I started cello, I wasn't about to stop. With permission from the hospice nurses, I took out my cello, sat down, and started to softly play Saint-Saens' "The Swan" for him. This grumpy old man picked apart a transitional shift and its color – "no! not that kind of vibrato! It should be faster!" – so I sped up my vibrato: I knew exactly what he

meant. Even when he started to doze (the wish of everyone present), he occasionally offered incidental commentary. I continued playing through his interjections this time, realizing he was falling asleep. Finally, I started to play through all six of the Allemandes from JS Bach's Cello Suites. These are reflective pieces – an invitation to peacefulness – and I highlighted their serene character by playing very softly. Indeed, the curmudgeonly old man eventually fell into a deep sleep. It was the last time I saw him alive.

He was my grandfather. Knowing that I brought peace to my Grandfather in his last days makes my life immeasurably more meaningful. My life is imbued with meaning through the almost daily opportunity to bring serenity, reflection, and connectedness to others through my cello. Even in the vastness of the concert hall, someone out there is a Grandfather, receiving my music.

This anecdote highlights the author's own sense of meaning at work derived from the contribution she made that day to her grandfather and that she continues to make to each concert-goer. Contribution is the pathway to meaning that arises when an individual takes action to produce something significant and/or to serve something greater than the self. And it is the pathway with perhaps the most diverse set of contributing elements, including self-efficacy, purpose, and two forms of transcendence.

Like the soloist's anecdote of meaning through individuation, research suggests self-efficacy is key to contribution, too. "A life that ha(s) purpose and values but no efficacy would be tragic," (Baumeister & Vohs, 2002, p. 610). In order to produce something significant and of value for others, a musician must have a belief in his or her ability to act on those goals, which in this story is the author's belief in herself to play for her grandfather and contribute in the concert hall.

Finding meaning in work through contribution also necessitates a sense of *purpose*, which connects the present to the future. Whereas meaning may be construed as a marker of stability in a constantly changing life, purpose may be seen as direction and intention in life. Purpose may manifest as goals (an objective aspiration that directs action, such as seeking musical connections in the concert hall) or fulfillments (a future state of being, such as being in love) (Baumeister & Vohs, 2002). A sense of purpose contributes to an individual perception of *significance* of work, as well as a set of shared *value systems*, or shared goals, among work teams (Rosso et al., 2010). In this story, a sense of purpose arises from connecting the author's experience of playing for her grandfather into the concert hall realm.

The final element of the contribution pathway to meaning is *transcendence*, or experiences beyond or outside of oneself. In this context, transcendence can take two forms: *interconnection*, or perceiving positive effects from one's work and thus feeling greater to connection to other people, and *self-abnegation*, or intentional subordination to a group or other external entity greater than oneself (Rosso et al., 2010). Both processes of transcendence may occur with spirituality, in connection with or deference to a higher power. Regardless of the presence of a spiritual element, however, transcendence brings connection, as manifest by the author's connecting in the concert hall. Thus, through agency in self-efficacy and connection via transcendence, *contribution* manifests as a source of meaning in work.

Job crafting. Job crafting is a process of sculpting a job to one's self, and doing so has been shown to enhance meaning at work generally (Wrzesniewski, Berg, & Dutton, 2010) and can be a way of following the contribution pathway to meaning specifically. Three components of job crafting offer opportunities for ensuring the employee is shaping her job, and not the other way around: 1) *cognitive crafting* adjusts perceptions of work, such as altering one's perception

from merely playing notes on a page to contributing to a significant musical performance; 2) *relational crafting* intentionally builds helpful social connections at work, and can be a form of contribution when asking if there is someone you can help, even in the smallest way; 3) and *task crafting* is changing practical aspects of the work itself, including what's *not* in the core job description but might be useful to the organization. For orchestra musicians, cognitive crafting as a way of cultivating contribution may entail envisioning a particular individual to mentally spotlight in the concert hall, such as the author with her Grandfather. Focusing attention on one person "receiving" the music may be more engaging than what may be experienced as more diluted energy when playing for 2,000 people. Relational crafting to foster contribution may involve mentoring more junior colleagues or supporting a fellow musician confronting a personal challenge. And task crafting might mean contributing by adjusting small but important components of work, like making time to interact with concert-goers before or after a performance. More than just a single intervention, job crafting may be a suitable process for orchestra musicians to consider as a way to pursue not only opportunities to make a meaningful contribution, but ultimately all four pathways to finding meaning in work.

Unification (others + communion)

Monday, April 25, 2016

Dear Diary,

In PE today, we played kickball and I got picked last again. I hate it and I hate that big feeling inside when I'm excluded, when you can tell Jen and Sarah and everyone is counting who's left to see which team has to be stuck with me. Even though no one says it, I can feel it. I play way outfield so it doesn't matter that I'm there, since no one kicks that far anyway. Why can't I be good at this and be included? It feels so angry. I wish I had a red pen to write with.

-Maggie

Saturday, April 30, 2016

Dear Diary,

Today the most amazing thing happened. I got to play with YoYo Ma! The famous cello player! I got to play, on the STAGE, in the big concert hall with red seats and pretty wood walls, and a bunch of us played cello with grown-ups who are really good at playing cello in the Philadelphia Orchestra (I wonder, do they also like to practice? I don't! I get annoyed at Mom reminding me to practice every day). I could tell they liked it because a few of them smiled at me. I wasn't the worst one! I got to play Twinkles, Allegro, and Song of the Wind with them. It felt like a big bath of cello sound and I almost couldn't hear my cello because of everyone playing together. I felt so big and small all at once and it was amazing.

-Maggie

In much the same way that self-connection is a pathway to meaning that arises from alignment between one's actions and one's identity, unification is the pathway that comes from alignment between one's actions and others (Rosso et al., 2010). Maggie's journal entry shows the positive effect of an orchestra's engagement program of bringing people together, with children and professionals alike experiencing meaning through belongingness. Maggie's sense of inclusion arose from *belongingness*, or identification with and feeling connected to a group membership. Belongingness may enhance meaning through positive association with identity and friendship. Additionally, *social identification* promotes greater social compatibility, and *interpersonal connectedness* enhances one's attachment to a group.

Research has also shown that leadership styles can effect perceptions of meaning at work (Bono & Judge, 2003), as well as connect work to a broad perspective that expands employees' perceptions beyond themselves (Rosso et al., 2010). An orchestra conductor is a particularly vivid example of influential leadership: as the sculptor of musical concept, a conductor has the most effectiveness to unify her orchestra with artistic vision in rehearsal and performance. Whether they are forged by the leadership of conductors or through experiences like Maggie's, social connections at the orchestra create a sense of communion – and unification – with others.

High quality connections (HQCs). HQCs are relationship-based interventions that create brief positive interactions between two people, and have been shown to increase trust, vitality, and resilience in work relationships (Stephens, Heaphy, & Dutton, n.d.). Through *respectful engagement* (physical and attentive presence, body language, expressed interest), *trusting behavior* (which includes dependability, integrity, and good intentions), and *task enabling* (advocating for and supporting others' work), creating HQCs at work are effective micro-moments and building blocks for bonding and unifying people (Dutton, 2003). For musicians, for instance, task enabling may appear in encouraging yet inconspicuous expressions of support mid-concert, such as use of body language to convey praise after a neighbor's exposed solo. Dependability, integrity, and good intentions as necessary components of trusting behavior are crucial attributes of elected musician committee members, who act on behalf of musicians. For musicians seeking unification, cultivating HQCs may be an appropriate avenue for positively effecting meaning in work.

Navigating the Pathways

Concluding this review, the four pathways of individuation, self-connection, contribution, and unification offer numerous possibilities for enhancing musicians' meaning in work. Rather

than prescribing a singular set of instructions, this frame work and these initial interventions provide opportunities for musicians to adapt these suggestions according to their individual needs. Given research on person-activity fit (Schueller, 2014), personally chosen mechanisms are likely to be most effective for increasing meaning in work. Furthermore, recognizing specific underlying mechanisms such as task crafting, dependability for creating trust, appreciating applause, or using a signature strength in a new way, for instance, may assist musicians in identifying the most personally relevant options for increasing meaning in work at any given point in their careers. Future directions would build on this foundational investigation by proposing a more robust set of interventions to further disseminate pathways of meaning in work, thereby positively affecting the field of professional symphony orchestras.

Further Research on Meaning in Work

While this review provides initial background on enhancing meaning at work, research from the social sciences provides foundational theories and studies to support this exploration. Recall the two dimensions that give rise both to the four pathways to meaning discussed earlier (Rosso et al., 2010) and to the tensions in psychological narrative of many orchestra musicians: self / other and agency / communion. Each of these dimensions has been studied extensively with respect to work fulfillment and more generally.

As just one example, self-determination theory (SDT) provides a way of understanding and studying individual motivation, how motivation may be internalized and therefore more integrated into the self, and thus, more meaningful to the individual (Brown & Ryan, 2015; Rosso et al., 2010). Also with respect to the “self,” concepts of personal identity and distinctiveness provide key insights into psychological underpinnings at the individual level (Rosso et al., 2010; Vignoles, 2009).

In regards to “other” (or “group,” a term more relevant to musicians), social science offers research on group human nature. For instance, a sense of belongingness highlights Maggie’s experience with the group cello performance, and research also identifies not only the positive effects of feeling included in a group, but also the negative impacts of feeling excluded or experiencing a lack of social connections (Baumeister & Leary, 1995; Dickerson & Zoccola, 2009). Other perspectives on humans’ group nature stem from research on social capital (Burt, 2000), a kind of social currency, as well as evolutionary and physiological foundations of human attachment that describe a biological basis of social connections (Bowlby & King, 2004). Further research on group behavior – such as socially benevolent actions of altruism – demonstrates favorable effects of humans’ social nature (Scott & Seglow, 2007). A high point of human social nature may be collective peak experience (Walker, 2010), in which a group, such as a symphony orchestra, may simultaneously experience awe, or group efforts that culminate in feelings of fulfillment, joy, and even transcendence.

Along the other dimension, the concept of agency has emerged from social cognitive theory (Bandura, 2002). Agency, or the ability to act, may manifest as both individual agency *and* group agency. That is, the ability to act empowers both the “self” *and* the “other,” the individual and the group. For musicians, agency may be key to cultivating meaning in work, in which both individual and group perspectives are essential for musicians of a symphony orchestra.

A full exploration of these foundational theories is beyond the scope of this paper, but supplemental support for this introduction to meaning in work appears in Appendix C. Those curious readers who read the appendix will find a review of the constructs mentioned above, in sections on the self (self-determination theory, and identity and distinctiveness), on others

(belongingness, social capital, and several perspectives of group behavior and experiences), and on resolving individual and group perspectives (a discussion of agency from social cognitive theory).

Conclusion

This paper seeks to investigate ways to enhance musicians' meaning at work, and presents four avenues of possibility: individuation, self-connection, contribution, and unification. Those four pathways feature individual and group sources of meaning that may be appropriate mechanisms for orchestra musicians to recognize and subsequently interpret and engage with in personally meaningful ways. In addition to exploring meaning at work from theoretical, empirical, and practical perspectives, another aim of this paper is simply to start a conversation: Especially for what is often a decades-long and often rewarding career, one of the challenges for an individual musician may be finding ways to matter within the whole. Thus, offering tools for the Suzannes to find or create meaning in work may be one way to mitigate those challenges, as well as enhancing existing meaning in work for the Sheilas who may already have a sense of contribution and agency. Furthermore, focusing on meaning in work directs attention to the positive effects that orchestras may have, and allow these organizations to capitalize on what's working. As an art form that unites communities of diverse audience patrons⁴, or ignites a spark of inspiration in a young child observing musical excellence, symphonic performance has the ability to move, inspire, and ultimately, change people through powerful musical experiences. By empowering individual musicians to heighten their own sense of meaning in work, the cumulative effect may be even greater collective experiences for all – perhaps most importantly the audience, for whom music is performed and for whom musicians deliver musical messages

⁴ Diversity initiatives are an explicit component of many orchestras in the US, discussion of which is beyond the scope of this paper.

that span centuries, bridge geographical divides, and connect communities. Thus, meaning in work not only serves to enhance musicians' lives individually, but focusing on meaning in work also magnifies an orchestra's ability to best serve its purpose: to transform and unite people through performances of classical music.

Appendices

Appendix A

Positive Psychology: A Brief Introduction to the Field

The quest for meaning has existed since the dawn of human life. While this search is most certainly not new, the field from which current research – and this paper – emanates is the modern social science of positive psychology. Positive psychology investigates and attempts to enhance that which constitutes human well-being. It is fundamentally about the best things in life, and also about living the best life we can: it is a comprehensive model of psychology (J. Pawelski, personal communication, September 9, 2016). “Positive” in this context refers to a preference towards optimism and enhancement of the desirable and good. Furthermore, the field of positive psychology is distinguished from other branches of psychology in two ways: it has a theoretical orientation towards the positive (like humanistic psychology, for example, but unlike the traditional, medical framework of psychology), and it has a foundation in scientific research (like the medical framework, but unlike humanistic psychology). Thus, what defines positive psychology is its scientific focus on human flourishing.

The field of positive psychology studies human well-being at the individual, relational, organizational, and cultural levels, and seeks to enhance well-being through the application of empirically studied interventions. Positive interventions arose from Seligman’s (2002) research in *Authentic Happiness*, and subsequently in Lyubomirsky’s (2007) 12 happiness activities, for example. Analysis of those and subsequent interventions for conceptual clarity, broadened scope, and enhanced research and application informs and enables future applications. Positive interventions are the change agents that activate positive psychology: they are an essential component of positive psychology in practice.

Positive psychology as a field encompasses three main areas of study or investigation: positive subjective experiences, positive individual traits, and positive institutions that foster positive experiences and traits (Peterson & Seligman, 2004). Positive subjective experiences include, for instance, flow, characterized by an intense focus that removes outside distractions, and is gratifying (Csikszentmihalyi, 1990). The state of flow is also challenging: it requires effort, and necessitates that skills meet the challenge. Positive individual traits refer to characteristics at the personal or dyadic (pair or relational) level that increase well-being and positive emotion, such as relationship-enhancing communication skills, or the identification of character strengths such as humor, honesty, or zest which can positively impact self-esteem (Peterson & Seligman, 2004; Niemiec, 2013). Positive institutions are organizations that cultivate positive subjective experiences and positive individual traits, such as the government of Bhutan embracing positive psychology through its measurement of Gross National Happiness (Adler, 2016) to the 2007 founding of the International Positive Psychology Association (n.d.), with its Fifth World Congress on Positive Psychology in July, 2017. Positive psychology, then, studies and promotes human well-being through positive experiences, traits, and institutions, and offers theory, research, and practice towards enhancing human well-being. This paper's goals of investigating and increasing meaning in work – a component of well-being – are served by the efforts of positive psychology.

Appendix B

Context of the American Professional Orchestral Field

The population of American professional symphony orchestra musicians may particularly benefit from applications of positive psychology, and specifically, enhancing meaning in work. A brief outline of the orchestra profession will provide context, and a description of a typical orchestra's organizational structure follows.

Structure of a Typical American Professional Orchestra

A typical professional orchestra is a non-profit organization that consists of three parts: musicians, management, and board. Additionally, the music director is the conductor who is usually considered part of the artistic component of the orchestra and who oversees most large-scale artistic vision in the organization, in addition to conducting much of the season. The musicians are members of a local musicians' union as well as a national union (American Federation of Musicians [AFM], n.d.). The AFM assists in negotiating musicians' contracts to gain health and retirement benefits, medical, parental or compassionate care leave, and wages. The management and staff of an orchestra consist of a CEO or Executive leader, with managers responsible for fundraising and development, marketing and public relations, media, production, and musician personnel. The board of an orchestra holds fiduciary responsibilities, hires the CEO, and, often in cooperation with the musicians and CEO, hires the music director, makes expected financial contributions to the organization, and otherwise behaves as an ambassador for the orchestra. All three parties normally participate in the negotiation of the musicians' contract, or collective bargaining agreement.

Impact of Professional Orchestras

According to the League of American Symphony Orchestras (n.d.), the lead management forum that collects data from American orchestras, an estimated 105,000 musicians performed in some 1600 orchestras in the US, performing 28,000 concerts and reaching 24.9 million people in the 2013-14 season. The traditional Top Five orchestras (Boston Symphony, New York Philharmonic, Philadelphia Orchestra, Cleveland Orchestra, and Chicago Symphony) maintain endowments from about \$120 million in Philadelphia to well over \$400 million in Boston, with the LA Philharmonic and San Francisco Symphony – now considered on par with the leading east coast major orchestras – sustaining endowments and budgets in range with Boston's. In any given week between September and May, most major orchestras perform a given program 2-4 times each week. In the author's Philadelphia Orchestra, with an average of three concerts per week, in a concert hall with an audience capacity of 2500, the Philadelphia Orchestra may reach some 7500 individuals in sold-out performances per week (Kimmel Center, n.d.). Since the 1960s, a hallmark of a "destination" orchestra is a full, 52-week season, for which a summer season like the Philadelphia Orchestra's may include, for instance, international tours, national residencies, and local performances at Neighborhood Concerts and the Mann Center for the Performing Arts (Philadelphia Orchestra, n.d.). The implications for artistic message and impact are therefore significant in a profession whose non-profit organizations actively contribute to the national economy in a number of ways, among them creating jobs, engaging local businesses, and positively affecting commerce through related services such as hotels and restaurants, in addition to providing educational, community-building, and philanthropic opportunities.

Musician Hiring Practices

According to the International Conference of Symphony Orchestra Musicians (n.d.), a code of ethical audition practices was established in 1984, a document intended to serve professional orchestras in their most fundamental musician hiring practices. While specific rules regarding blind auditions are orchestra-specific, the majority of American professional orchestras utilize a screen at some point in their auditions, a practice that has contributed to greater gender diversity of musicians advanced and hired (Goldin & Rouse, 2000). Another important component of the orchestra profession is the granting of tenure following a successful probationary period normally spanning 1-2 years. Both audition and tenure practices are specified in each orchestra's contract to define every step in the process, from votes and percentages required to advance, hire, or be granted tenure, grievance and legal procedures, and audition committee personnel. The orchestra union contract, or collective bargaining agreement, in addition to defining audition and tenure practices, also defines work rules that include concert duration, overtime, rehearsal break times, run-out concert distance limits, per diem allowances, travel rules, and concert attire.

In conclusion, this introduction to orchestras is a glimpse into the professional symphonic world. Abundant other research addresses more fully the typical professional orchestra's structure, artistic vision, and musicians' physical and psychological well-being, as well as domain-specific, performance-related studies on excellence, deliberate practice, and talent development, for instance. Additionally, other essential constituents of an orchestral organization – managers and board – are beyond the scope of this paper, and represent another area of possible exploration. Future directions include separate investigations of meaning at work for managers and board members, just as this paper's focus seeks to enhance meaning in

work for musicians specifically. Finally, future directions may also extend studies to an integration of musicians', management's, and board's pathways to meaning at work, and synthesize research for the entire organization's benefit as a collective whole.

Appendix C

Supporting Theories and Supplemental Research

The following appendix will explore additional research that can deepen an understanding of meaning in work and ultimately support its pursuit. Research related to constructs of the self will be reviewed first, followed by research on others, including group behavior and experiences. A final section will connect concepts of the self and other, as social cognitive theory suggests, with research supporting the notion that agency is useful at the individual and collective levels.

Self

This exploration of research on the self will take a granular view from the orchestral musician's perspective, with a microscopic lens to the individual's psychological experience in the work context of an orchestra. The following sections focus on two theories that relate to the individual, and which offer support for the individuation and self-connection pathways to meaning. First, self-determination theory summarizes an approach to human motivation and related research; second, research on distinctiveness and identity spotlight the individual's self-identity.

Self-determination Theory

Throughout history, people have been studying human motivation. Philosophical foundations of motivation stem from Locke's (1899) view of volition: an individual's freedom to act on her own will. In self-determination theory (SDT), the exemplar of free will is autonomy, which is behavior that is self-determined and internally motivated. Other theories of motivation include functional SDT, SDT as a form of self-regulation, and causal agency theory (Wehnmeyer, Little, & Sargeant, 2009). However, this paper draws from Brown and Ryan's (2015) work for its comprehensive, widely accepted, and thoroughly cited research, and for its

demonstration that motivational tendencies have measurable impacts on psychological well-being and behavioral regulation. In recent social science, SDT argues that the origin of motivation may lie within or without the individual, intrinsically or extrinsically (Brown & Ryan, 2015).

SDT suggests that a key determinant of behavior is the type of autonomy felt by the individual engaging in an activity, and argues that motivational orientations may occur on a continuum: degrees of autonomy determine how effectively an activity is internalized (Brown & Ryan, 2015). In other words, even if a task is extrinsically motivated (a musician's need to earn a living), research suggests that behavior can be managed by the degree an activity is synthesized with the self (Brown & Ryan, 2015), such as a musician's self-connection with her performance experience. The following section describes the ways motivation may be integrated in the individual.

Continuum of autonomy. Within self-determination theory (SDT), three areas comprise the continuum of autonomy: *amotivation*, *extrinsic motivation*, and *intrinsic motivation* (Brown & Ryan, 2015). *Amotivation* is associated with non-autonomous behavior: an individual feels completely unconnected to the activity, and perceives no control, competence, or value in performing the behavior. This is non-regulated and impersonal motivation on the continuum of autonomy, the furthest from the gold standard of intrinsic motivation.

One step closer to the gold standard is *extrinsic motivation*, which includes four kinds of regulation, each with increasing degrees of autonomy. The least autonomous type of extrinsic motivation is *external regulation*, in which an individual behaves to fit an external pressure (e.g., a reward or avoiding punishment). This type of behavior feels forced and is perceived as having an external origin for motivation (Brown & Ryan, 2015). One small step closer to intrinsic

motivation is *introjected regulation*: this is behavior that is ego-involved, when an activity is engaged in to avoid guilt, or benefit from pride. Introjected regulation is therefore slightly more autonomous than external regulation due to its connection to self-worth. While introjected regulation may be a powerful source of motivation, it has been associated with negative impacts such as higher stress and anxiety (Brown & Ryan, 2015). Extrinsic motivation with slightly more autonomy, and thus closer to intrinsic motivation, is *identified regulation*. This behavior feels important, personal, and valued by the individual, with a motivational origin that is perceived as partially internal. It is therefore correlated with better performance and perseverance when compared with external and introjected regulation (Brown & Ryan, 2015). The fourth and most autonomously regulated of the extrinsic motivations is *integrated regulation*, in which behavior feels incorporated with the self, consciously consistent with one's values and identity, and is perceived as a fully internalized origin of motivation (Brown & Ryan, 2015). Work, even though it is externally motivated (such as earning a living), can become a rich source of meaning when one's personal values, motivations, and beliefs are aligned with it (Rosso, Dekas, & Wrzesniewski, 2010). While integrated regulation may seem similar to intrinsic motivation, it is distinguished by its external, separable results and focus on an outcome rather than the behavior itself.

Finally, intrinsic motivation is the apex of autonomous regulation: fully autonomous behavior is wholly self-endorsed, enjoyable, inherently gratifying, and engaged in with free will. Intrinsic motivation has positive impacts on creativity, performance, and psychological well-being (Brown & Ryan, 2015). Additionally, intrinsic, autonomous behavior has been connected to positive effects across varied cultures (Chirkov, Ryan, Kim, & Kaplan, 2003) and is associated

with harmonious passion, defined as a strong pull towards a self-chosen devoted activity that is enjoyable and considered valuable and important (Lalonde et al., 2015).

A quintessential example of intrinsically or autonomously motivated behavior may be flow, or optimal experience, in which one loses a sense of time and self-consciousness, and when skills match the challenging task at hand (Csikszentmihalyi, 1990). Optimal experience may be one way in which a musician, for example, can synthesize behavior (such as performance) with one's self, thus enhancing self-connection as a pathway to meaning in work. Additionally, optimally experience supports the pathway of individuation, in which mastery of a skill (such as instrumental technique) is a key characteristic of flow. From meaning pathways of self-connection and individuation, intrinsically motivated behavior plays a key role in enhancing meaning for the individual.

SDT thus describes a spectrum of autonomous behavior, with intrinsic motivation demonstrating the highest levels of positive effects, with a close second place for integrated regulation. Additionally, research on SDT suggests that autonomy – that key element of intrinsically motivated behavior – is one of three psychological needs of human motivation (Deci & Ryan, 2000). Along with autonomy, *competence* and *relatedness* form the triumvirate of needs that, when fulfilled, promote intrinsically motivated behavior and psychological growth, well-being, and integrity (Deci & Ryan, 2000). The following section introduces and describes these three psychological needs.

Self-determination theory: Three Psychological Needs

Within SDT, three components are essential: autonomy, competence, and relatedness (Deci & Ryan, 2000). Just as fulfillment of physiological needs (e.g., food and water) leads to physical development and growth, so too does fulfillment of these psychological needs lead to

psychological development (Grouzet, 2013). SDT further suggests that psychological needs are innate, necessary elements of healthy human functioning, and that the fulfilled needs of autonomy, competence, and relatedness play essential roles in optimal development.

Conversely, unmet needs are associated with decreased overall psychological well-being, anxiety, and depression (Deci & Ryan, 2000). A summary of these three psychological needs follows.

Autonomy. Autonomy refers to behavior that is self-determined and volitional. Research suggests that of all three needs, autonomy is the most essential for motivation to be intrinsic (Deci & Ryan, 2000). Studies in which participants engaged in intrinsically motivated activities demonstrated that they subsequently experienced decreased motivation when rewarded, scrutinized, or assigned deadlines on the previously intrinsically motivated activity (Deci & Ryan, 2000). The effects of rewards and feedback were also found to have a negative effect on problem solving and creativity (Deci & Ryan, 2000). These studies highlight what researchers call an external perceived locus of causality (E-PLOC), which shifts the origin of action to a separate source from the individual, thereby decreasing the sense of autonomy (Deci & Ryan, 2000). On the other hand, an internally perceived locus of causality (I-PLOC) refers to activities engaged in for their own sake, such as pursuit of an enjoyable hobby. Research on work orientations suggest that those who see their work as a calling – that is, work as an end in itself and engaged in for its own sake – also perceive work as part of a cohesive hierarchy of meaning in personal, moral, and socially important ways (Rosso et al., 2010).

Competence. Competence refers to self-efficacy, which is the belief in one's ability in given circumstances to obtain desired outcomes. Research suggests that self-efficacy can be a process that heightens meaningful association with an activity; that is, by choosing to change

elements of a job, a person may experience meaning through a sense of control in independent, proactive behaviors (Rosso et al., 2010). In other settings, positive feedback that communicates efficacy has been connected to feelings of competence, especially when positive feedback reflects performance for which the individual feels accountable (Deci & Ryan, 2000). In the orchestra, for example, a conductor's authentic constructive feedback to musicians can support competence fulfillment. On the other hand, negative feedback undermines felt competence (Brown & Ryan, 2015). Following studies that show fulfillment of competence needs, researchers suggest that competence is necessary for any type of motivation, from the four types of extrinsic motivation to intrinsic motivation (Deci & Ryan, 2000).

Relatedness. Relatedness refers to connections with other people. While not all intrinsically motivated activities require relatedness (e.g., a lone game of solitaire), research suggests that relatedness translates to a sense of security which helps facilitate intrinsic motivation (Deci & Ryan, 2000). Intrinsically motivated activities seem to occur more readily in socially supportive contexts, such as a classroom in which the teacher's style has a positive effect on students' learning (Deci & Ryan, 2000), or with expressions of care and acceptance from teachers, parents, or managers (Brown & Ryan, 2015). With regard to work, interpersonal and cultural influences can affect people's understanding of meaning in work: one's social context defines values and norms that effect social cues on how to interpret work meaning (Wrzesniewski, Dutton, & Debebe, 2003). For an orchestra musician, relatedness is an essential component of the inherent teamwork required for symphonic performance, thus satisfying the relatedness need.

Taken together, the fulfillment of autonomy, competence, and relatedness needs have profound positive effects on psychological well-being (Brown & Ryan, 2015). Research

suggests that satisfaction of these needs may facilitate internalization of external motivations, with implications for work and other adult responsibilities. For example, competence appears to play an important role in the internalization of extrinsically motivated tasks (such as a musician's ability to internalize a conductor's request), and an externally motivated behavior is more likely to be integrated when accompanied by a sense of free will and the perceived value of an activity (a conductor's ability to convey a sense of choice and artistic value, for instance) (Brown & Ryan, 2015). This review of SDT, the autonomy continuum, and fulfillment of the three psychological needs may be foundational in enhancing meaning at work for professional orchestra musicians.

Distinctiveness and Identity

Among the most basic needs of human beings is self-identity, which can be defined as subjective concept of oneself (Vignoles, Gollidge, Regalia, Manzi, & Scabini, 2006). In social science, research suggests an identity principle of distinctiveness – an individual's personal idiosyncrasies – as valuable across cultures (Vignoles, Chryssochoou, & Breakwell, 2000). Some theories suggest that distinctiveness is an off-shoot of self-esteem needs (Vignoles, 2009), and social science consistently supports the notion that people are normally motivated to protect and increase their self-esteem (Vignoles et al., 2006). Self-esteem may be influenced by external circumstances such as personal achievements (such as winning an audition) or group experiences (such as orchestral performances) (Rosso et al., 2010). In addition to self-esteem, other proposed self-identity processes include belonging, efficacy, and distinctiveness, (Vignoles et al., 2006).

For a musician, winning a position in a major American orchestra is contingent on individual skills exhibited in a highly competitive national audition. Winning an audition is the culmination of many years of dedicated effort, which effectively establishes a musical identity.

Where distinctiveness is associated with identity, the statement “I am a violinist” suggests both the speaker’s *identification with* others who play the violin, but a *distinction from* those who do not. An identity that incorporates both the need for distinctiveness (“I am a violinist” as an identity) and belonging (“I am a violinist” as within a network of violinists) successfully reconciles the two needs.

From self-determination theory, identity and distinctiveness, this review presents research on the self that relates to meaning in work. Finding or creating meaning at work may be heightened by awareness of such constructs at the individual level, with motivational orientations, psychological needs, identity, and distinctiveness underscoring much of an individual musician’s psychological experience. Having examined research with a lens towards individuals, the following section will focus on others, in human social nature.

Other

The following sections will investigate research through a wide lens of human social networks and effects of human social life, exploring the psychological foundations of an orchestral musician embedded in a group, a symphony of many voices. This section will explore elements of human sociality and effects of social nature that support unification and contribution pathways to meaning in work.

Social and group perspectives

Belongingness. Belongingness is a human desire for social connections, and fulfilling this need is essential for well-being (Baumeister & Leary, 1995). Belongingness, a form of relatedness in self-determination theory, is a key psychological human need along with competence and autonomy, that, when fulfilled, fosters psychological well-being (Deci & Ryan, 2000). Feeling socially accepted and cultivating and maintaining individual relationships are

crucial to positive self-esteem and positive feelings (Myers, 2015), such as feelings of connection with other musicians or work colleagues. Through work, people may interact with and create connections as members of a team or group that may promote meaning; organizations that offer chances for workers to give value to other community members in turn benefit from those employees who experience greater meaning through their sense of purpose, agency, and impact (Rosso, Dekas, & Wrzesniewski, 2010). For orchestra musicians, participating in off-stage education initiatives, for example, may increase meaning in work and also bonding with each other, their organization, and those people they are assisting.

Beyond well-being, research on group performance via collective intelligence is, interestingly, not related to the average or highest intelligence of individuals within the group; rather, collective intelligence is correlated with equality of conversational participation, proportion of females present, and average social sensitivity of the individuals in the group (Woolley, Chabris, Pentland, Hashmi, & Malone, 2010). These results suggest that group intelligence depends on social skills more than individual intelligence, and thus shows the importance of belongingness in groups for collective intelligence.

Strong emotional experiences – negative and positive – occur more often between people than alone (Baumeister & Leary, 1995; Jaremka, 2011). That is, social experiences elicit more intense emotions than emotions experienced alone. Additionally, personal relationship quality is a significant determinant of happiness and life satisfaction, even over different phases of life and across cultures (Peterson, 2006). The powerful influence of relationships also holds true for negative relationships: for example, when participants were asked about negative life events, more than anything else they described strained relationships gone awry (Peterson, 2006).

Feeling part of a group may also promote meaning through positive identification and connection with others (Rosso et al., 2010).

In addition to group networks, belongingness may also refer to intimate relationships. The blissful feelings at the start of a romance can trigger incorporation of the other person's traits into our own, a motivation for self-expansion or self-growth (Gable & Gosnell, 2011). This motivation also increases the desire for close connections, from romantic relationships to deep friendships. Furthermore, research suggests that more social ties, such as those motivated by self-growth, leads to greater well-being (Gable & Gosnell, 2011). In regards to physical health, a sense of belongingness may have a direct impact on the immune system, in which an absence of belonging can have deleterious effects: research on cancer patients showed married people had higher survival rates than single patients, even after controlling for diagnosis timing, chance of receiving treatment, and smoking cigarettes (Goodwin, Hunt, Key, & Samet, 1987). While significant decreases in well-being arise from death and divorce, research suggests that close relationships and social ties are essential for overall health and psychological well-being, with benefits including positive emotions, social support, intimacy, and shared experiences (Maisal & Gable, 2009).

Thwarted belongingness. While positive physiological outcomes arise from social support, negative outcomes from a lack of social connections are associated with social isolation and loneliness (Dickerson & Zoccola, 2009), which in turn are associated with shorter life spans (Cacioppo & Cacioppo, 2012). Absence of belongingness in marriage may result in extramarital affairs, particularly for women who cite unmet intimacy needs in their marriages (Baumeister & Leary, 1995). Divorce and death are accompanied by deep emotional struggle as these events mark the loss or end of a particular social bond (Baumeister & Leary, 1995). A lack of

belongingness as well as perceived social burdensomeness (such as thinking something “would be better off without me”) is associated with suicidal ideation and behavior (Van Orden, Witte, Cukrowicz, & Joiner, 2012). Jealousy, anxiety, depression, guilt, and loneliness have been linked to negative affect in either severed relationships, or absence of social bonds and friendships (Baumeister & Leary, 1995). Research has investigated the connection between belongingness and depressive symptoms, and has found support for the hypothesis that belongingness and social networks may be relevant for depression treatment and prevention (Cockshaw, Sochet, & Obst, 2012). Studies suggest that lonely individuals would decrease socially avoidant behavior following subtle social acceptance cues, showing the influence of positive perceptions of social acceptance (Lucas, Knowles, Gardner, Molden, & Jefferis, 2010). In conclusion, belongingness is a key element of human life, with its benefits including enhanced well-being, and its absence associated with numerous negative outcomes. For orchestra musicians, reaffirming social aspects of work life may increase meaning in work through increased positive social connections, in addition to the emotional benefits of belongingness in a musical group.

Attachment theory and oxytocin. One way of understanding human social life is from an evolutionary viewpoint: humans need social ties to survive. By staying close to caregivers, children increase their chances of survival, and for ancestors, groups that worked together successfully triumphed over human opponents or predatory animals. Essentially, human ancestors evolved as social animals (Myers, 2015).

Investigating humans’ social nature, attachment theory describes the necessity of secure emotional attachments early in life and suggests that within the first six or so months of life, an infant has already identified a strong attachment to the parent, often the mother (Bowlby & King,

2004). The physiological basis for attachment is the hormone oxytocin, which increases significantly during pregnancy and childbirth, and inspires subsequent care-giving and attachment (Haidt, 2006). Oxytocin also protects: it lowered stress levels even when a participant held a stranger's hand while facing a threat of electric shock, with a spouse's hand-holding shielding the effect of the shock even more than the stranger's (Coan, Shaeffer, & Davidson, 2006). This evidence suggests that closer relationships are more powerful than distant or no relationships. Oxytocin and social support have also been shown to decrease stress and enhance calmness (Heinrichs, Baumgartner, Kirschbaum, & Ehlert, 2003). In addition to mitigating stress, oxytocin is associated with the growth and maintenance of social ties, and has also been connected to socially benevolent behavior (Dickerson & Zoccola, 2009) and increasing trust between people (Kosfeld, Heinrichs, Zak, Fischbacher, & Fehr, 2005). Oxytocin may be part of physiological responses to social stimuli and contribute to positive social interactions, and which may also be an underlying factor in positive effects of certain alternative therapies such as hypnosis or meditation (Uvnäs-Moberg, 1998). Thus, an evolutionary perspective of human social nature is an essential component of this exploration of human group behavior, experiences, and social life.

Social capital. A society can be understood simply as a large group of people. Additionally, it can be viewed as an organized trade of goods, ideas, and experiences that are useful or beneficial for those people within it (Burt, 2000). Some people will earn more than others, become more skilled, or have more opportunities and advantages in the marketplace of society. Social capital, then, within the context of this view of society, becomes social advantage, with norms, trust, and social networks allowing a group to work together; it is a form of social currency. That is, some people become dependent on others, connect with others, hold

obligations and become indebted, or create trusting relationships that involve support and feedback, for example. For those who hold a desirable role in society, they hold social capital, which promotes advantage and opportunity (Burt, 2000).

Social influence can affect behavior and attitudes through information and processes. In the work context, social roles influence meaning of work via colleagues and also identity with work and social networks (Salancik & Pfeffer, 1978). For musicians, being a member of an orchestra can affect social influence and personal identity. In regards to values and social capital, personal values may be influenced by work as well as influence one's workplace involvement, thus creating a reciprocal relationship between the two. Such values might stem from cultural social influence, organizational or immediate social influence, as well as personal influences that together comprise a system of values for an individual, which also vary from one person to the next (Rosso et al., 2010). Social capital is therefore a form of social currency that connects and shapes relationships among people, while also positively effecting meaning at work.

Bonding and Bridging. Bonding and bridging are two key elements of social capital. Bonding is a group's internally-directed attention to its own homogeneous and distinctive characteristics, such as with a family or close friends. Bridging is externally-directed attention, beyond and across social networks with groups of people who have different identities, such as distant communities (Szreter & Woolcock, 2004). One study of four U.S ethnic groups demonstrated greater health effects from bonding than bridging, in which neighborly bonding was associated with enhanced self-assessed health and lower stress (Beaudoin, 2009). Research on disaster relief suggests that bonding connections remain stronger for a longer period of time than bridging (Rabiul, 2014). While these studies show bonding has greater positive impact than

bridging in social contexts, another study of work teams found a positive correlation between both bonding and bridging's impact on team performance, in which team identity influenced the relationship between the team's social network structure and its performance (Henttonen, Johanson, & Janhonen, 2014). This study suggests that bonds for one's in-group or team may have been influenced by the presence of an out-group (the other team). Thus both bonding and bridging highlight the effects of connecting exclusively with one's own in-group and well as inclusion of out-groups.

For an orchestra, bonding may occur within instrument sections, such as among violinists. Bridging for violinists may occur across the orchestra to the brass section. Viewing the organization as a whole, bonding within the management team may occur, while bridging could occur in meetings inclusive of musicians and management, for example. Even a performance demonstrates bonding and bridging relationships, in which musicians bond with each other in performance, and invite inclusive bridging to the audience, thus accentuating different types of group relationships that exist within orchestral organizations.

Hive psychology. Where psychologists and some economists prefer studying individuals, anthropologists, sociologists, and many economists prefer investigating groups (Haidt, Seder, & Kesebir, 2008). In particular, examining evolution enables an understanding of group behavior. Studies of insect colonies' social life have shown how a hive colony works as a unified and single organism (Wilson & Wilson, 2007). Relating insect colony behavior to human social behavior demonstrates that some tribal, communal, and religious group activities fostered transcendent experiences. A human group, in this context, will be understood as a collection of unrelated people, and not confined to close relationships (Wilson & Wilson, 2007). The hive hypothesis contends that, like our ancestors, some of modern humans' greatest moments of joy

arise from group experiences resembling those that shaped and influenced our ancestors' evolutionary succession. Ancestral celebrations of births, deaths, and marriages signified evolutionary success. Group activities surrounding those celebrations sparked joy, awe, and, often, transcendence of the self, including ecstatic, altered mental states following rituals involving rhythm and synchronized movement (Haidt, Seder, & Kesebir, 2008; Keltner & Haidt, 2010). Modern manifestations of collective transcendent joy may appear in festivals, performances (such as an orchestra concert), and celebrations.

Hive psychology allows people to forget self-interest and, like bees, become enveloped and lost in something greater than themselves. Historian William McNeill, who fought in World War II, describes his battle psychology: "A sense of pervasive well-being is what I recall; more specifically, a strange sense of personal enlargement; a sort of swelling out, becoming bigger than life, thanks to participation in collective ritual" (Haidt, 2006, p. 237). Cacioppo and Cacioppo (2012) observe that synchronous experience has been linked with increased social connection, improved group cohesion, and emotional support fulfillment, as exemplified in McNeill's experience in extreme circumstances.

In the context of the orchestra, hive psychology explains much of what is inspiring about a musician's experience through bonding in musical performance. Similar to the contrasts of bonding and bridging, however, hive psychology may also illuminate the tribalism and institution-wide internal strife that the Philadelphia Orchestra has suffered recently. Research on how organizations face adversity suggests that group ties may weaken following a threat (especially if that group doesn't defeat the threat), resulting in internal conflict (Staw, Sandelands, & Dutton, 1981). In the case of the Philadelphia Orchestra, recent adversities arose in the context of financial challenges (Chapter 11 bankruptcy reorganization in 2011) (Wakin &

Norris, 2011), contentious union contract negotiations (Dobrin, 2015), and the 2016 strike (Cooper, 2016). However, Baumeister & Leary (1995) suggest that groups generally seem to bond and connect more in the face of threats than not. For example, military veterans who experienced heaviest combat reported closest ties some 40 years after WWII as compared to soldiers who experienced less combat (Elder & Clipp, 1988). While empirical and theoretical studies propose increased internal cohesion in the face of external adversity, however, these results may be inconsistent owing to a number of variable factors in research (Stein, 1976). Given the inconclusive nature of consistent, empirically-based research in this area, the Philadelphia Orchestra may need its constituents to achieve healthy internal bonding by means of its own techniques and interventions to shape its own future.

Collective peak experience. In the quest for human beings' happiness and well-being, psychologists and philosophers have studied high points of human experience, including positive emotions such as enjoyment, serenity, love, and gratitude, for example. Among positive emotions are those that arise from peak experiences (Maslow, 1964), or optimal experience or flow (Csikszentmihalyi, 1990), which describe similar phenomena of emotional pinnacles. Maslow (1964) defines peak experience as a person's deep connection to the universe, in which the whole world becomes unified, with perceptions of full, non-judgmental focus, of self-transcendence (losing a sense of self), intrinsic value of the activity, and a sense that the world is good and accepting. Often, reverence and sacredness is reported, with awe, transcendence, wonder, and humility accompanying peak experiences. For Csikszentmihalyi (1990), optimal experience is a state of "flow," of being in the "zone," when an individual becomes completely absorbed in the task at hand, losing a sense of time and self-consciousness, and when the activity's challenges are met with matched skills. Flow states are also intrinsically motivated;

that is, the task has inherent worth for the individual engaged in the activity (Csikszentmihalyi, 1990). While peak experiences are most often associated with individual experience, research on collective optimal experiences may be a possible pathway for communion in creating meaning in a symphony orchestra.

In Maslow's (1964) terms of awe and wonder, observing the expert collaboration of a musical team in a symphonic performance may elicit a humble glimpse of something vast that can create awe. The concert hall experience, for some audience and musicians alike, is a divine one. Awe, according to Haidt (2006), is the emotional experience of self-transcendence, of rising beyond the self. Awe and transcendence resonate particularly with musicians' experience in hive psychology, in which contribution to something greater is key to successful orchestral performance, and in which synchronous sonority and movement is the definition of symphonic experience. Thus, optimal experience is often part of expert performance experience. Simply put, social flow is more enjoyable than solitary flow (Walker, 2010).

In research studying group peak experiences of orchestra musicians, results found that indeed, individual virtuosity translated to collective virtuosity and peak performance (Marotto, Roos, & Victor, 2007). Furthermore, collective flow contributed to enhanced self-efficacy and self-esteem at the individual and group level, as well as promoting social integration, collective identity, and communion (Páez, Rimé, Basabe, Włodarczyk, & Zumeta, 2015). Collective flow also influenced social validation and contagion (Culbertson, Fullagar, Simmons, & Zhu, 2015), as well as higher degrees of flow in more socially interactive situations than less interactive (Rufi, Włodarczyk, Páez & Javalov, 2016). Importantly, collective self-efficacy beliefs and flow were found to have a positive reciprocal relationship over time, (Salanova, Rodríguez-Sánchez, Schaufeli, & Cifre, 2014): in other words, positive feelings of flow influence feelings of

competence, and competence influence flow experiences. It is necessary that the highest degree of challenge and skills be matched in a given activity to activate optimum engagement, which characterizes peak experience (Salanova et al, 2014). Evidence on how emotions spread reinforces the social benefits of collective flow, and overall interconnection with the group (Walker, 2010). Workplaces that offer group opportunities to face challenges matched to skills promote the highest potential for collective flow experiences. Therefore, symphony orchestras are ideal workplaces for fostering optimal experiences when these criteria are met.

Advantageous Social Phenomena

Altruism and prosocial behavior. The hive hypothesis is not the only concept derived from the study of insect colonies. Altruism, or “promoting the interests of others” (Scott & Seglow, 2007, p.1), is a beneficial outward orientation exhibited by insect colonies and considered by some scientists to also be a human evolutionary adaptation. In fact, altruistic groups overcome selfish groups (Wilson & Wilson, 2007). Altruistic, prosocial behavior may be seen as a subcomponent of selflessness as it, too, is founded on beneficial other-oriented behavior found in insect hives.

According to an evolutionary perspective described by Wilson and Wilson (2007), the term “social” refers to behavior that affects both oneself and at least one other person. This term generally includes, among other behaviors, cooperation, prosociality, and also aggression, for example, because of their effects on others. Specifically, prosociality is understood as evolutionarily advantageous: in this mode, humans adapted and advanced as prosocial groups over selfish groups (Wilson & Wilson, 2007). Pearce (1980) found that increased familiarity encourages helpfulness, even among strangers, while a negative mood discourages altruism (Barden, Garber, Leiman, Ford, & Masters, 1985). In the orchestra field, the essential belief that

a non-profit musical organization exists for the betterment of society lies at the heart of altruistic philanthropic behaviors. Research suggests Board members' communication and connection with orchestra musicians and patrons is valuable to Board members' role in the organization, thus reinforcing beneficial bonds of altruism (Grant, 2008). In sum, prosocial behavior and altruism lie at the heart of human nature, and orchestras at their best may even be understood as an extension of prosocial group behavior in community work and performances alike.

Social and emotional contagion. An advantageous group behavior noted by social scientists is social and emotional contagion, or the spread among group members of social information and emotions (Burt, 2000). Research suggests emotional states can be transferred to other people by imitation of facial expression: One study of social networks demonstrated that different degrees of proximity (intimacy of a social relationship, and/or geographically close proximity of a social relationship) influence the level of emotional contagion, and that the effects were diminished by time and distance (Fowler & Christakis, 2008). People are more inclined to mimic the emotional expressions and body language of others with whom they feel close and are physically proximate (Cacioppo & Cacioppo, 2012). Social and emotional contagion can therefore be understood as pathways of connection between people, thus contributing to social advantage.

Relative to the context of the orchestra, close proximity has the greatest impact for emotional contagion (Fowler & Christakis, 2008). In the concert hall setting, as an enclosed space of typically 2,000 people absorbed in a shared musical experience, a symphonic performance is an ideal setting for distributing emotions as a musician's tool of communication and engagement. A deeper understanding of how emotional contagion in the concert hall is achieved could enhance orchestra musicians' connection with audiences by means of effectively

and authentically conveying the emotional content of the music they perform. Traditionally this role has been focused on the conductor, but a more pervasive communication might be achieved by optimizing the engagement of the entire orchestra in the process of authentic emotional contagion.

Mirror neurons and mimicry. The physiological phenomenon of mirror neurons may shed light on the process of emotional contagion. Cacioppo and Cacioppo (2012) summarized research on neurophysiological data that generally have been interpreted as a basis for the direct-matching hypothesis: humans comprehend actions by mentally charting visualizations of the observed movement. For instance, a study of imitation demonstrated brain activity that mimicked the action itself: merely observing an activity (in this case, a finger movement) elicited the same brain activity as actually moving one's finger (Iacobini et al., 1999). For an orchestra musician, imitation is not only an essential component of childhood instrumental skill-building (such as imitating one's teacher or care-giver), but also an important part of communicating information in a full orchestra rehearsal: imitation and mental charting could explain efficiency and immediacy from conductor's requests to musicians' performance, in which musicians must flawlessly execute musical passages without first physically practicing a requested change.

In creating emotional connections, mirror neurons have been found to be effective in developing empathy, which is putting oneself in another's shoes (Bloom, 2013), or feelings of care for another person in need (Batson, Ahmad, & Lishner, 2009). While the neurological effects of mirror neurons remain somewhat unclear, the connection between empathy and altruism is clearer (Bloom, 2013). Empathy, according to Batson and colleagues (2009), is a source of altruism, which is an evolutionarily and socially advantageous behavior. In addition to its connections to empathy, mimicry also positively impacts prosocial behavior, and has been

shown to foster social learning as well as adaptive behavior (Cacioppo & Cacioppo, 2012). One study suggests that mimicry effects prosocial behavior more generally, and contributes to overall positive social behavior (van Baaren, Holland, Kawakami, & van Knippenberg, 2004). Taken together, both mirror neurons and mimicry have relevance in the socially contagious setting of a symphony concert hall: authentic expression of musically-based emotions and encouraging prosocial behavior describe important elements of social behavior in orchestras.

In sum, this survey of human social nature offers background on what happens when people do things together. From belongingness to collective peak experience, these phenomena of human social life describe examples of visible *and* inconspicuous experiences for orchestra musicians, and highlight facets of orchestra life that may not yet be explicitly understood.

While group behavior is essential to parsing an orchestra musician's psychological experience, though, one goal of this paper is to consider both the "self" and "other" side-by-side: key to orchestra musicians' experience is the powerful interaction between the two states of mind. The following section will present research on the overlap between individual and group perspectives. Recalling the four pathways to meaning in work, those avenues incorporated interacting components of agency and communion, self and other. The following section will discuss the balance and relationship between these seemingly disparate constructs, and attempt to resolve the tension between self and other.

Resolving Individual and Group Perspectives

Social science addresses the concepts of self and other in several ways, one of which is through individualism and collectivism (Bandura, 2002). Individualism here refers to an orientation towards the self as a priority over the group, with a mentality of independence (such as the "individuation" pathway to meaning in work). Collectivism refers to an emphasis on the

group with an orientation of interdependence, in which group and social norms are favored (“other”, “unification” pathway). Such an exploration addresses the psychological experience of an orchestra musician, in the author’s view, as the typical musician must meet personal demands for efficacy and mastery, while musically blending and behaving as a member of the whole orchestra. This paper will offer social cognitive theory as a possible resolution to individual and group differences.

Social Cognitive Theory

Previous sections of this paper have separately explored constructs of the self and social groups, or individualism vs. collectivism. While individualism and collectivism may appear to be opposing constructs (and some research suggests they are; see Markus & Kitayama, 1991), social cognitive theory rejects the duality inherent in these contrasts when taken from an agentic perspective. Agency is the ability to take action. Human functioning requires a daily balance between individual and group culture (in this paper’s theme, think of an orchestra musician), and while an individual sense of agency is required to effect one’s life circumstances, many activities and life’s necessities are accomplished by group effort. In other words, neither absolute individual agency nor absolute group agency exist. As such, social cognitive theory addresses the tension between these necessarily co-existing realities by defining three types of agency: individual, proxy, and collective (Bandura, 2002).

First, *individual agency* is direct influence of one’s life circumstances through one’s own intentional actions, by bringing change to oneself and one’s immediate surroundings by personal action. Second, *proxy agency* depends on entrusting others to act on behalf of the individual, as with political representatives, or parents on behalf of children. Proxy agency acknowledges that people do not have direct control over every aspect of life; this socially accepted approach to

agency becomes one pathway for enacting intentions. Finally, *collective agency* recognizes that significant influence comes from joining forces at the group level, and as such, groups of people can act as a community of supported, shared goals and combined resources (Bandura, 2002).

From the perspective of an orchestra musician, then, “agency” becomes a unifying concept that melds the “self” with “other”: a musician relies on individual agency for skill and mastery, and proxy agency for elected committee roles and principal players acting as representatives of their respective sections. For the entire group of musicians, reliance on collective agency for musical performance is key for group functioning as well as off-stage necessities in negotiations and other group efforts, for example. The following section describes more fully each of the three forms of agency in social cognitive theory.

Social cognitive theory: Individual, proxy, and collective agency

Individual agency. Essential to agency at any of the three levels is a sense of efficacy. Self-efficacy is what one believes s/he can do in given circumstances to obtain desired outcomes; self-efficacy beliefs greatly influences human functioning (Bandura, 2002). For centuries, psychologists and philosophers have explored the ideas of human will, motivation, effectiveness, and achievement in motivation, social learning, and behavior (Maddux, 2009). More recently, however, Bandura (1977) refined the concept and defined the term self-efficacy as one’s belief that one can effect desired change, a self-belief in one’s ability to coordinate and connect one’s skills to change a given situation (Maddux, 2009). In recognizing the importance of individual self-efficacy, research suggests that in childhood development, two foundations of self-efficacy arise. First, from symbolic thought and language acquisition, the child develops self-awareness, which is key for cultivating personal agency; secondly, through responsive environments (a caregiver’s encouragement or support, for example), the child comes to understand that her actions

matter (Maddux, 2009). Furthermore, throughout life, research suggests fundamental origins of self-efficacy. The most potent source comes from performance experiences, that is, actual attempts to change or control one's environment (Maddux, 2009). In diminishing levels of effectiveness, vicarious experiences, imagined experiences, and finally verbal persuasion are the other key sources of self-efficacy (Maddux, 2009). Self-efficacy remains the key mechanism for personal agency, which influences whether individuals experience challenges as demoralizing or exhilarating, and how individuals experience their emotional lives, decision making, motivation, and cognitive processes (Bandura, 2002). For example, in a study on post-traumatic growth, perceived self-efficacy enabled post-traumatic recovery (Benight & Bandura, 2004).

Self-efficacy is also related to motivation. Self-efficacy needs are often fulfilled in people who experience harmonious passion through an enjoyable and rewarding activity (Lalande et al, 2015) and who are intrinsically motivated to engage in a given activity. Fulfilled self-efficacy arises from a sense of mastery (Maddux, 2009): a musician's skillful preparation for rehearsal and performance demonstrates satisfaction of self-efficacy needs, which in turn contributes to increased individual well-being (Deci & Ryan, 2000). Thus, for a musician, the reward of a skillful performance and positive feelings of accomplishment may act as motivators for continued self-efficacy practices.

Proxy agency. Whereas the use of direct personal agency requires a degree of skill and knowledge, proxy agency may be useful when an individual doesn't want the responsibility or burden of direct control, lacks appropriate knowledge or mastery required for the endeavor, or believes another could do a task with higher quality or effectiveness (Bandura, 2001). By ceding immediate control to a representative, vulnerability arises and a level of trust is bestowed upon the enactor: the proxy is temporarily endowed with the other's competence, power, and approval

(Bandura, 2001). In an orchestra, elected musicians represent other orchestra colleagues on committees that negotiate union contracts, meet with managers to discuss committee-specific issues, and otherwise act on behalf of those who have entrusted them with proxy agency. On stage, a section leader, such as the concertmaster, often behaves as a proxy representative for a given instrument family. A vivid example of proxy agency is what orchestra musicians cede to conductors, from musical to institutional decisions. Thus proxy agency is an inherent part of an orchestra, in which select people are chosen to act on the interests of others towards shared goals.

Collective agency. Individual self-efficacy beliefs are core to the idea of agency because personal efficacy is essential to accomplishment at the individual level *and* group level, in which members of a group unite their collective abilities towards a shared goal. In this way, groups can also embody self-efficacy beliefs. Collective efficacy allows groups to effectively pursue shared goals, combine resources, and exhibit resilience in overcoming obstacles (Bandura, 2002). From studies on group brainstorming to initial research on social and political action, research is starting to look at the impact of collective efficacy beliefs (Maddux, 2009), in which, for example, collective efficacy is significantly correlated with group performance (Stajkovic & Lee, 2001). While group effort may accomplish more than a lone individual can, however, research suggests that at both group and personal levels, strong individual efficacy beliefs enhance group effort and performance (Bandura, 2002). In a collective group such as an orchestra, strong efficacy beliefs about performance translate to critical outcomes, notably powerful, moving musical experiences for both musicians and audience. Given positive reviews and recent accolades from music critics nationally and internationally (Dobrin, 2017; Grella, 2017; Stearns, 2017), it would appear that the Philadelphia Orchestra musicians, in partnership with their conductors, are evincing strong self-efficacy beliefs in performance. Future directions might

include a survey of musicians' off-stage collective self-efficacy beliefs: high self-efficacy beliefs would potentially affect the Philadelphia Orchestra's post-bankruptcy institutional recovery and growth and musicians' ability to effect the organization's growth, simply as a state of mind.

Four essential processes of agency

Underlying each level of agency are four processes that contribute to agency's effectiveness. Those processes are *intentionality*, *forethought*, *self-reactiveness*, and *self-reflectiveness*. A brief description of each follows.

Intentionality. An intention is a future action to be completed. Agency requires intention; it is distinguished from merely forecasting a future occurrence by an individual's chosen commitment to act in a certain way. Intentions and actions are separable functions of agency, divided by time (Bandura, 2001), and where the outcome is separate from the intention. Intentionality, as one of the essential components of agency, is a plan of action with a strategy for making the action happen. Collective plans require shared intentions by a group, and need a commitment to coordinate strategies to make the endeavor happen (Bandura, 2006). Groups that are successful in performance, such as an orchestra in performance, are well-coordinated in collective intentionality.

Forethought. Forethought motivates the future intentioned occasion. The anticipatory aspect of forethought allows one to create goals and structure towards enacting the future intention. By anticipating the event with forethought, and organizing behavior according to the future event, one may remove obstacles that hinder successful outcomes of the intentional event (Bandura, 2001). Anticipatory self-guidance connects the future events to the present, and fosters intentional behavior towards the goal (Bandura, 2006). In an orchestra, forethought may be relevant for the rehearsal process in preparation for a series of concerts; in other words,

awareness of future performance may be motivating to the maintenance of concentration in rehearsal.

Self-reactiveness. Self-reactiveness refers to tracking one's behavior, cognition, and surroundings to give insight and direction towards changing one's environment. In addition to intention and forethought, which are cognitive elements of agency, self-reactiveness requires management of one's behavior to bring about desired change (Bandura, 2001). The more specific, difficult, yet attainable the intention or goal, the more likely it is that one will self-regulate behavior as a pathway towards enacting the goal (Locke, 1996). Agency is not only about intentions, but also about bringing those intentions to fruition through planning towards those realizations and through strategic actions (Bandura, 2006). Self-reactiveness for an orchestra musician is essential for immediately responding to what one hears musically, and reacting accordingly: the conductor may give a different cue in concert than in rehearsal, or a solo part may differ from one concert to the next. Thus, self-reactiveness and behavioral self-regulation are key components of an orchestra musician's agentic skills.

Self-reflectiveness. Self-reflectiveness involves observation and analysis of one's own behavior judged against one's behavior, others' reactions and thoughts, and before-after analysis of actions in the given environment (Bandura, 2001). This degree of cognition allows people to reflectively consider their thoughts and actions, and is the highest level of self-analysis in agency. Through self-reflectiveness, one perceives self-efficacy, that most essential ingredient of agency (Bandura, 2001). For an orchestra musician, self-reflectiveness arises as self-awareness and awareness of how one's behaviors may impact the whole group.

In conclusion, intention, forethought, self-reactiveness, and self-reflectiveness comprise the essential features of agency at the individual, proxy, and collective levels. Agency is the key

concept that unites perspectives of the self and the group through social cognitive theory; it describes the overlap between these two concepts. Within an individual, utilization of at least individual agency -such as mastery of a musical instrument - as well as collective agency -in symphonic performance- are necessary for an orchestra musician's participation (and, while proxy agency is also utilized via section leaders or conductors, a thorough discussion of this is beyond the scope of this paper). Within the group, collective agency and individual agency are also present, connected by agency's key mechanism of self-efficacy at both levels. Agency, however, also describes the relationship of self and other in larger contexts, such as cultural tendencies. A brief discussion follows.

Agency across Cultures

Absolute agency -of individual, proxy, or collective agency- does not exist, since people constantly adapt to the environment, other people, and changing circumstances (Bandura, 2002). Social cognitive theory, with relevant studies in cultural orientation, rejects the duality of individualism vs. collectivism (Bandura, 2002). For example, Markus and Kitayama's (1991) theory considers collectivist cultures (such as Japan or China) and individualistic societies (e.g., western countries such as the USA, Germany) as mutually exclusive from a social perspective; yet social cognitive theory's view of agency emerges as a key universal component to human functioning. The reality of daily life across cultures incorporates all three categories of agency - individual, proxy, and collective - and may be a theme in understanding human psychology more universally. Indeed, agency's key component of efficacy beliefs appear generalizable across cultures, in which strong self-efficacy perceptions result in higher performance achievements (Bandura, 2006).

Thus, agency appears to be a unifying factor across cultures: social cognitive theory reconciles cultural differences by showing how agency underlies efficacy beliefs across the globe. For orchestra musicians, synthesizing individual and collective agency may be crucial, in which perceiving both types of agency as essential may lead to a unifying psychology for this population. The mastery of skills required for individual self-efficacy fulfills the key psychological need of individual agency, and participating in the symphonic whole necessitates collective agency. Further investigating the underlying psychological experience of orchestra musicians may be one way that social science can understand agency across individual, proxy, and collective levels, to clarify distinctions among these three degrees of agency in social cognitive theory as well as synthesize theories of agency in social science.

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