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Ignatian Spirituality and Career Development: New Evidence for Age-Old Practices

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Abstract

Given the importance of career discernment in emerging adulthood, we evaluated an understudied career development approach for higher education students. Specifically, we tested the relationship between spiritual discernment exercises and sense of purpose and calling through the indirect effects of self-concept clarity, career decision self-efficacy, and knowledge of occupational information. Participants ($N = 127$) were randomly assigned to one of the three conditions and were surveyed at a 10-week interval. Results indicated significantly higher posttest scores for purpose ($B = .169$, $p = .026$) and calling ($B = .134$, $p = .013$) in the spiritual discernment condition compared to the general adjustment (i.e., control) and traditional career development conditions. Mediation analyses also revealed a significant indirect effect of self-concept clarity on sense of purpose ($B_{ab} = .059$, $p = .033$). These findings suggest that spiritual discernment practices can significantly enhance the effectiveness of career development interventions for discerning purpose and calling.

Keywords

vocational identity, career, counseling/practice/process and outcome, career decision making, research content areas, Ignatian, spirituality, spiritual discernment

Consider the typical experience of an undergraduate student. Freshly graduated from education systems of rigidity and structure, these students face profound freedom and autonomy in higher education. With this freedom, however, comes expectations of personal development and identity discernment as well as a host of negative consequences when those expectations are not met. To elaborate, individuals with less clarity about their sense of purpose have higher risks of stress (Steger & Frazier, 2005), depression (Mascaro & Rosen, 2005), and anxiety (Bigler et al., 2001). These risks present higher education institutions with an obligation to provide support, but the call to action is even more pronounced when considering the many benefits of thorough discernment alongside those risks. These benefits include increased happiness (Hill, Edmonds, et al., 2016), organizational commitment (Duffy et al., 2011), future income and net worth (Hill, Turiano, et al., 2016), and career decision self-efficacy

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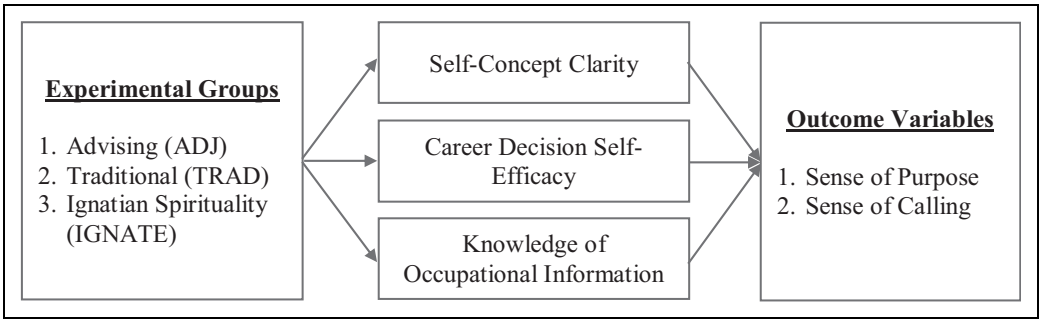

Figure 1. Comprehensive model.

(Dik & Steger, 2008). Together, this evidence leaves higher education institutions with both an opportunity and an obligation to invest in the career development of their students.

Career development and vocational counseling in these settings must be tailored to the audience being counseled. For instance, career guidance given to a mid-career manager would undoubtedly differ from that provided to college graduates. The latter in particular fall within a developmental age-group known as emerging adulthood (Arnett, 2006; Reifman et al., 2007), characterized by (a) a tendency to experiment and explore their identity with minimal commitments (Kroger & Marcia, 2011; Schwartz et al., 2013); (b) high rates of change in relationships, places of residence, and career paths (Smith et al., 2011); (c) optimism about the future and its possibilities (Reifman et al., 2007); (d) a focus on self-development and growth (Arnett, 1998); and (e) a unique feeling of being "in-between" adolescence and adulthood. Subsequent research on this age-group has also highlighted a focus on intrinsic work values like growth and meaningfulness over material outputs like pay and job titles (Jin & Rounds, 2012), and, perhaps most importantly for this study, some evidence suggests this group is more open to spirituality than to institutional religion (Hardie et al., 2016; Koenig et al., 2008).

Together, these qualities suggest that emerging adults are well positioned for career guidance that is more existential and identity-laden in nature, guidance that often implicates terms like calling and purpose. Providing this guidance effectively, however, requires the systematic study of career development and novel approaches for cultivating such outcomes. One novel approach is the use of spiritual discernment exercises as a career development practice, which may show potential, given its alignment with the underlying definition of calling as an experience with the transcendent or immaterial (e.g., Dik & Duffy, 2009). As such, the purpose of this study is to examine the relationship between spirituality-infused career development and the vocational outcomes of purpose and calling in a population of emerging adult students. To better understand how this program impacts such outcomes, we also explore self-concept clarity, career decision self-efficacy, and knowledge of occupational information as explanatory mechanisms for this relationship (see Figure 1).

Calling, Purpose, and Their Connection to Career Counseling

Although calling and purpose are often used interchangeably in colloquial conversation, they represent conceptually distinct constructs with a common foundation in their emphasis on meaningfulness (Dik et al., 2013; Dik & Duffy, 2009). A sense of purpose, for instance, is a stable and overarching intention to achieve something meaningful (Damon et al., 2003). A sense of calling is also oriented toward what one finds meaningful but is distinct in that it is more specific than a sense of purpose, oriented toward serving something beyond oneself such as others or the world, and perhaps most noteworthy for the present study perceived as originating from the transcendent (e.g., the universe, God, culture; Dik & Duffy, 2009). That said, both calling and purpose share a foundational quality at their core; they are

both oriented toward a pursuit of meaning. In the context of career counseling, this means that career resources designed to help students foster a sense of calling or purpose must also help students identify which career paths they find meaningful. To do so, they must leverage the underlying mechanisms that foster a clear understanding of meaningful types of work.

Mechanisms in Career Counseling

Three mediating mechanisms for career counseling addressed in this study are self-concept clarity, knowledge of occupational information, and career decision self-efficacy, each of which helps individuals identify and articulate meaningful career paths. Specifically, self-concept clarity represents the consistency and stability of one's understanding of their personal qualities (Campbell et al., 1996). This clarity often results from the self-reflection that several of the present study's activities encourage and, from a career construction perspective (e.g., Savickas, 2013), equips individuals with the necessary information to construct a meaningful self-narrative for career discernment. To elaborate, prior research suggests that engaging in self-reflection activities allows individuals to build a deeper and clearer understanding of who they are (Csnak & Conway, 2004). Additional evidence further suggests that this increased clarity in turn allows individuals to develop a better sense of what they find meaningful and would find meaningful in a given career path (Adam et al., 2018; Shin et al., 2016), which feed directly into existential outcomes like calling and purpose (Dik & Duffy, 2009; Dik et al., 2012).

When coupled with knowledge of occupational information, the importance of this work becomes even more salient. Knowledge of occupational information is the retention of information about various careers, information that is needed to thoroughly consider what would be expected and experienced in various occupations. Lent and Brown (2019) described the importance of this knowledge for fostering realistic outcome expectations, and recent research suggests that it allows individuals to make a better judgment of whether or not certain careers will be congruent with their interests (Pesch et al., 2018). Based on trait-factor theory and evidence, both self-concept clarity and knowledge of occupational information should thus enable more effective discernment of careers that have high congruence with one's personal qualities, which in turn can translate to a deeper sense of meaning found in those careers and a stronger sense of purpose and calling (Chen, 2001; Dik & Duffy, 2009; Dik et al., 2012).

Finally, career decision self-efficacy also plays an important role in connecting career counseling efforts to outcomes like calling and purpose. Career decision self-efficacy is the belief that one can successfully make career decisions (Betz et al., 2005). From a social cognitive career perspective (Lent & Brown, 2019), the successful discernment of career paths requires this belief in one's career decision-making abilities. Specifically, both the theory and recent research suggest that career counseling interventions like that of the present study, which leverage a protean (i.e., self-directed) career orientation and career information, can help to strengthen an individual's career decision-making self-efficacy (Li et al., 2019; Pesch et al., 2018). Recent research also suggests that this self-efficacy is then in turn predictive of subsequent meaning in life (Sari, 2019) and career decidedness (Li et al., 2019; Penn & Lent, 2018), both of which play into the focal outcomes of calling and purpose (Dik & Duffy, 2009; Duffy & Dik, 2013). For that reason, it is important that career counseling activities serve to improve students' career decision self-efficacy to empower them through the ambiguity of career discernment. Altogether, these mechanisms are essential for strengthening calling and purpose through career counseling interventions, the best practices for which are described below.

Best Practices for Career Counseling Interventions

There are numerous career counseling resources and practices that can be effective for helping students make career decisions (Brown & Krane, 2000; Whiston et al., 1998). In particular, a frequently cited

meta-analysis from Brown and Krane (2000) suggested five critical ingredients for ensuring the effectiveness of career development interventions. The first of these is the use of written exercises, which entail a cognitive reflection process that helps individuals solidify their long-term retention and understanding of career information (Whiston & James, 2013). Another important career development ingredient is the use of individualized feedback. Whiston and Rahardja (2008) described how this can come in the form of individualized attention or via feedback or guidance in group settings, which may be helpful for cultivating career decision self-efficacy and shaping vocational interests (Lent & Brown, 2019). The third important aspect of career development interventions is the inclusion of specific occupational information (e.g., information about various careers, the current labor landscape). Whiston and Rahardja (2008) noted that many participants can and do pursue this information outside of career counseling interventions by inquiring with peers, networked professionals, and family members, but it is essential that counselors provide structure and direction within their interventions so that individuals can obtain this information.

The fourth best practice is the use of role models for effective career decision making (Brown & Krane, 2000). This can be beneficial for students' discernment of career paths because it provides examples of successful discernment, thereby empowering students to take action and strengthens their career decision self-efficacy. Finally, Brown and Krane (2000) also suggested that building support for career discernment is a critical ingredient. This is important because emerging adults often discern their career paths while balancing familial, financial, and educational obligations, which can act as stressors in the decision-making process, making social support from counselors and peers even more important.

The aforementioned evidence suggests that career development interventions can help students develop and articulate a meaningful career path by fostering career decision self-efficacy, self-concept clarity, and knowledge of occupational information. Yet, a question remains as to whether these ingredients and activities are sufficient to translate to the existential feeling of a purpose or calling. Recent work has suggested that incorporating the topic of calling into career counseling can be effective for fostering a sense of meaning and career decision self-efficacy (Dik & Steger, 2008), but this did not have an effect on one's sense of purpose or felt the presence of calling. As such, in the present study, we sought to deepen the calling aspects of a career intervention by introducing resources and practices associated with spiritual discernment grounded in a framework from St. Ignatius of Loyola.

Ignatian Spirituality in Career Development

Theological scholarship on spirituality and calling is far from young (Placher, 2005), but the empirical study of its role in career development is much more recent (Dik & Duffy, 2009; Duffy & Dik, 2013). Although there are many theological traditions that espouse discernment, we employed a Christian spirituality framework from St. Ignatius of Loyola. This framework shows potential for career development interventions largely because of its assumptions about the transcendent and its framing of spirituality as the discernment of how to make concrete what one finds true or meaningful (Lonsdale, 2005). Moreover, St. Ignatius of Loyola is well known for one of the most widely used set of spiritual practices in university settings: the Ignatian spiritual exercises. Core to this paradigm of spirituality are five primary tenets (Martin, 2012).

The first of these is the emphasis on detachment. Ignatian spirituality emphasizes the value of detachment from that which prevents one from hearing and responding to a transcendent calling in life. By making time to detach from the busyness of modern life, students become able to more deeply experience that which they define as transcendent or immaterial. A second core tenet of Ignatian spirituality is the view of the transcendent as incarnate—that is, that the transcendent is not isolated from the human experience but rather intimately connected with it. This assumption about the transcendent

is essential for conversations about calling as it allows for a framing of calling as a fully possible interaction between an individual and what they perceive as transcendent. Moreover, the view that the transcendent is relatable lends itself to an additional source for social support as it conceptualizes the transcendent as involved and compassionate toward one's career discernment process. The third aspect of Ignatian spirituality discussed by Martin (2012) is the view that spirituality can be embedded into everyday life through the practice of being contemplative in action. This practice gives emerging adults additional space in the midst of their busy lives to explore the experiences that give them a feeling of meaning and to interact with the transcendent as a source of calling.

The fourth element of Ignatian spirituality is the assumption that the transcendent is fully present in all things and experiences, even those things one views as material or secular. This is important for discerning a calling because it encourages the exploration of how the transcendent might be experienced even in the most commonplace experiences of one's life. Finally, Martin (2012) described how Ignatian spirituality is notably pragmatic in its emphasis on equally important practical forms of discernment (i.e., networking, researching different career paths). In this way, Ignatian spirituality does not replace traditional discernment but rather enhances it. Overall, when combined with traditional career development interventions, these tenets show potential for enhancing one's discernment of calling and purpose beyond existing practices for career counseling.

Purpose of Oour Study

We sought to explore the value that this spiritual discernment framework could provide in career counseling interventions. We designed a random clinical trial to evaluate the relationship between career development interventions using spiritual discernment exercises and calling and purpose. Specifically, we hypothesized that an Ignatian spirituality–infused intervention would outperform career interventions that included only general adjustment resources or those resources along with traditional career development activities. We further hypothesized that self-concept clarity, career decision-making self-efficacy, and knowledge of occupational information would mediate the relationship between the Ignatian spirituality–infused intervention and purpose and calling (each modeled separately). Figure 1 provides an overview of these hypotheses.

Method

Participant Characteristics

Participants were higher education students in their second year at a private, Christian, not-for-profit/doctoral university with moderate research activity in the Pacific Northwest. Required courses in Christian theology served as the venue through which the intervention was administered. A majority (61.3%) of the sample were 19 years old ($M = 19.48$, $SD = 1.36$), domestic students (96.8%), and identified as heterosexual (94.4%) and female (80.6%). In terms of race, a majority (64.5%) of the sample identified as White, with 15.3% identifying as Asian, 10.5% identifying as Hispanic or Latino, 4.8% identifying as Black or African American, 1.6% identifying as Native Hawaiian or Pacific Islander, and 3.2% preferring to self-describe. Finally, with regard to employment status, many of the students (72.0%) were working part-time, with 24.0% of the students not currently working. The remaining 4.0% of students either worked full-time or were working in an unpaid role (e.g., unpaid internship).

Sampling Procedures and Research Design

Students who were enrolled in theology courses (required of all students for the institution's general curriculum) in winter or spring quarters (10 weeks each) were required to take part in the online career intervention. Students were randomly assigned (using randomizer.org) to one of the three conditions of

the online career program. Once assigned to a condition, the participant was given a link via email to take a pretest survey on Qualtrics. Only after completing the pretest access was given to the online career intervention hosted on the institution's learning management system. Two weeks prior to the end of the quarter, the link to the posttest survey was distributed by email. The study was approved by the institution's review board (SPU IRB# 171801007, expiring November 27, 2018). Only data from students who consented to allow their data to be analyzed are included in this article.

Experimental Manipulation

The intervention was designed in collaboration with the university's on-campus career center and was based largely on their collective set of career development resources known as the "Field Guide" (Orlando et al., 2017). These resources included activities, exercises, and reflection prompts that span across both traditional, secular career development topics and existential, spiritual discernment topics. For the present study, we converted these resources into an "Online Field Guide" (Orlando et al., 2018), hosted on the institution's learning management system, Canvas. The Online Field Guide provided students with a similar set of resources and activities as the on-paper Field Guide but also included interaction with graduate career advisors (doctoral students in clinical and industrial-organizational psychology programs who had training in vocational psychology). The graduate career advisors provided feedback on all submitted assignments and were available to respond to questions and encourage participation/engagement.

Students were randomly assigned to one of the three conditions. The general adjustment (ADJ) condition received a resource about feeling lost in one's career path and a required activity to meet with their academic advisor and submit a reflection assignment on their second-year experiences. The traditional career exploration (TRAD) condition received the same resource and activity plus seven additional resources and four required activities on informational interviewing, job shadowing, comparing occupational information, professionalism, changing majors, and navigating uncertainty. The Ignatian spirituality–infused (IGNATE) condition received all of the ADJ and TRAD required activities and resources in addition to five spiritual discernment resources and three required activities on daily contemplative prayer, discernment in community, discernment of the transcendent in one's experiences, discernment for decision making, and finding rest or a sense of "sabbath" during higher education. Each version of the intervention included information, links to additional university resources, and written reflection exercises for each of the topics. See Table 1 for the full list of resources and activities included in the Online Field Guide.

With regard to masking, participants were not told about the nature of the condition to which they were assigned. Because the random assignment occurred within classrooms, some students became aware that there were varying numbers of assignments and voiced concerns about the fairness of the required activities. Graduate career advisors and the principal investigator were aware of the random assignments and were flexible in allowing excused assignments for students who genuinely were unable to cope with the required investment into the activities in addition to their current work and education obligations.

Measures and Covariates

Self-concept clarity. Self-concept clarity was measured using the 12-item Self-Concept Clarity (SCC) Scale from Campbell et al. (1996). The SCC Scale is said to measure the clarity, consistency, and stability of one's understanding of their own personal qualities (Campbell et al., 1996). Participants were asked to rate the extent to which they agree or disagree with "self" statements using a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). Example statements include "I spend a lot of time wondering about what kind of person I really am," "Sometimes I think I know other people better than I know

Table 1. Activities in the Present Study.

Activity	Brief Description	Condition		
		ADJ	TRAD	IGNATE
Daily *Examen* prayer	Encourages reflection of emotions and thoughts from the prior day, in communication with a transcendent source.			X[a]
Professionalism	Provides guidance on how to correspond professionally.		X	X
Informational interviewing	Provides directions for how to set up and conduct informational interviews.		X[a]	X
Job shadowing	Encourages job shadowing and offers suggestions for how to find job shadowing opportunities.		X[b]	X
Changing majors	Provides support for students considering changing majors.		X	X
Navigating ambiguity	Provides support and guidance for navigating feelings of confusion and being lost.	X	X	X
LinkedIn use	Offers statistics about the value of LinkedIn and guidance on creating a profile.		X[a]	X
Discernment individually	Provides guidance in reflecting on the many voices we listen to when discerning.			X
Discernment in Community	Provides guidance on discerning callings from the transcendent.			X
Discernment to decision making	Provides an engaging method of discerning important life decisions.			X[a]
Retreat and rest	Encourages students to find rest through fun and engaging ways (e.g., group retreats).			X[a]
Advisor meetings	Invites students to meet with their advisors and discuss their development and next steps.	X[a]	X[a]	X[a]

Note. Students had access to different activities and resources based on their randomly assigned experimental condition. In total, students in the ADJ condition were given two resources or assignments, while students in the TRAD and IGNATE conditions were given eight and 13, respectively. ADJ = general adjustment condition; TRAD = traditional career exploration condition; IGNATE = Ignatian spirituality–infused condition.
[a]Denotes a topic that included a required activity. [b]Denotes a topic that included two resources and two activities.

myself," and "In general, I have a clear sense of who I am and what I am." Early research with university students demonstrated sufficient internal consistency values for the 12-item SCC Scale ($\alpha = .86$; Campbell et al., 1996), with follow-up research demonstrating even stronger internal consistency ($\alpha = .89$; Hanley & Garland, 2017). Internal consistency values for these items across imputed data sets ranged from $\alpha = .86$ to .87 in the pretest data and $\alpha = .86$ to .86 (within 0.001) in the posttest data.

Career decision self-efficacy. Career decision self-efficacy was measured using the Short-Form version of the Career Decision Self-Efficacy Scale (CDSE-SF) that includes 25 items of Taylor and Bentz's (1983) original 50-item measure (Betz et al., 2005). Participants were asked to rate their confidence that they could perform a certain career decision-making task using a scale from 1 (*no confidence at all*) to 5 (*complete confidence*). Example items included "Make a plan of your goals for the next five years" (planning) and "accurately assess your abilities" (self-appraisal). Using data from college students, Betz et al. (2005) found internal consistency ranging from .94 to .95 when using all 25 items and a 5-point Likert-type response continuum; internal consistency values for these items across imputed data sets in this study ranged from $\alpha = .95$ to 95 (within 0.001) in the pretest data and $\alpha = .94$ to .95 in the posttest data.

Knowledge of occupational information. Knowledge of occupation was measured using four items from the 20-item My Vocational Situation assessment (MVS; Holland et al., 1980). The original MVS was used a dichotomous true/false response scale with 18 items plus four items related to occupational information

and four items related to barriers to occupational goals. Recent research has demonstrated success using a 5-point response option for MVS items, with internal consistencies ranging from .82 to .91 (Hirschi & Herrmann, 2012, 2013). In the present study, participants used a scale from 1 (*not true*) to 5 (*true*) to respond to the four occupational information items that stemmed from an opening line stating, "I need the following information." Example items included "how to find a job in my chosen career" and "what kinds of people enter different occupations." Using a sample of higher education students and workers, Holland et al. (1980) found Kruder-Richardson (KR-20) estimates of .79 for males and .77 for females for these items. Internal consistency values for these items across imputed data sets in this study ranged from $\alpha = .90$ to .91 in the pretest data and $\alpha = .87$ to .90 in the posttest data.

Sense of purpose. Sense of purpose was measured using a 7-item version of the Purpose subscale of the Psychological Well-Being (PWB-P) assessment from Ryff (1989), modified by Abbott et al. (2006). Participants rated their agreement with statements using a 6-point Likert-type scale from 1 (*strongly disagree*) to 6 (*strongly agree*). An example statement was "I am an active person carrying out the plans I set for myself." In past research, the 20-item PWB-P demonstrated an internal consistency estimate of $\alpha = .90$ and a test–retest reliability estimate over a 6-week interval of $r = .82$ (Ryff, 1989). Subsequent research has demonstrated that 14-item (Ryff et al., 1994) and 7-item (Abbott et al., 2006, 2010) versions of the tool can also be used with sound psychometric properties. Internal consistency values for these items across imputed data sets in this study ranged from $\alpha = .78$ to .79 in the pretest data and $\alpha = .73$ to .76 in the posttest data.

Presence of calling. Presence of calling was measured using 12 items from the 24-item Calling and Vocation Questionnaire (Dik et al., 2012). Participants responded to statements about their calling using a scale from 1 (*not at all true of me*) to 4 (*absolutely true of me*). Example items included "I do not believe that a force beyond myself has helped guide me to my career" and "Making a difference for others is the primary motivation in my career." Dik et al. (2012) reported internal consistency levels up to .90 using the 12-item measure with university students. Internal consistency values for these items across imputed data sets in this study ranged from $\alpha = .90$ to 90 (within 0.001) in the pretest data and $\alpha = .85$ to .86 in the posttest data.

Data Preparation and Missingness

The final data set included 127 cases; however, due to attrition, only 94 cases included complete, usable data at both time points. While attrition rates did not vary by condition, $\chi^2(2) = 4.367$, $p = .113$, and missingness surfaced in an unproblematic, haphazard pattern (Enders, 2010, 2017), 26% of cases and 13% of data set values had missing data. Based on recommendations from Olinsky et al. (2003) and a statistically nonsignificant Little Missing Completely at Random (MCAR) test using the participant's condition to inform the model, we proceeded to account for missingness using a stochastic method of multiple imputation.

Enders (2010, 2017) suggested that multiple imputation can be a robust and flexible approach for handling attrition-caused data. As such, we created composite scale scores and auxiliary variables to inform the imputation model based on recommendations from Little et al. (2008). A fully conditional Markov chain Monte Carlo (MCMC) specification procedure in IBM's Statistical Package for the Social Sciences (SPSSVersion 26) was used for the imputation, with maximum case draws specified at 100 and maximum parameter draws at 25. Simulations from Graham et al. (2007) suggested that an imputation of 20 data sets from which to pool results can produce findings that are minimally biased and sufficiently powered. As such, we imputed 20 data sets from the pre- and postdata. See Table 2 for means, standard deviations, internal consistencies, and intercorrelations for the pooled estimates across imputed data sets and Table 3 for the same values taken from the nonimputed data sets. Differences between Tables 2 and 3 are negligible.

Table 2. Means, Standard Deviations, and Scale Correlations for Imputed Data.

Measure	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. T1 self-concept clarity	3.226	0.659	(.865)									
2. T1 career decision self-efficacy	3.609	0.633	.426**	(.952)								
3. T1 occupational information	3.140	1.196	.222*	0.402**	(.903)							
4. T1 sense of purpose	4.520	0.755	.503**	.475**	.179*	(.781)						
5. T1 presence of calling	3.015	0.647	.246**	.418**	.005	.410**	(.901)					
6. T2 self-concept clarity	3.356	0.663	.614**	.422**	.197*	.461**	.339**	(.860)				
7. T2 career decision self-efficacy	3.763	0.605	.394**	.764**	.388**	.429**	.408**	.584**	(.945)			
8. T2 occupational information	3.204	1.128	.299**	.476**	.548**	.255**	0.256**	.404**	.600**	(.886)		
9. T2 sense of purpose	4.630	0.693	.309**	.422**	.221*	.541**	.392**	.524**	.570**	.284**	(.741)	
10. T2 presence of calling	2.973	0.548	.264**	.404**	.152	.427**	.691**	.296**	.479**	.259**	.446**	(.858)

Note. $N = 127$. Standard deviations and internal consistencies calculated as the average across imputed sets; correlations represent pooled estimates across imputed sets.
*$p < .05$ level (two-tailed). **$p < .01$ level (two-tailed).

Table 3. Means, Standard Deviations, and Scale Correlations From Nonimputed Data.

Measure	*M*	*SD*	1	2	3	4	5	6	7	8	9	10
1. T1 self-concept clarity	3.226	0.662	(.866)									
2. T1 career decision self-efficacy	3.610	0.641	.436	(.954)								
3. T1 occupational information	3.140	1.204	.224	.413**	(.906)							
4. T1 sense of purpose	4.522	0.760	.503	.476**	.180*	(.784)						
5. T1 presence of calling	3.015	0.651	.246	.421**	.006	.413**	(.901)					
6. T2 self-concept clarity	3.365	0.747	.762	.483**	.227*	.527**	.409**	(.899)				
7. T2 career decision self-efficacy	3.781	0.689	.477	.854**	.446**	.473**	.476**	.600**	(.964)			
8. T2 occupational information	3.216	1.260	.382	.550**	.653**	0.295**	0.319**	.425**	.628**	(.936)		
9. T2 sense of purpose	4.641	0.769	.372	.469**	.255*	.611**	.454**	.557**	.583**	.306**	(.794)	
10. T2 presence of calling	2.984	0.617	.331	.458**	.186	.482**	.804**	.308**	.494**	.277**	.479**	(.897)

Note. Maximum possible sample used for each correlation. *N* ranges from 95 to 127.
*$p < .05$ level (two-tailed). **$p < .01$ level (two-tailed).

Table 4. Regression Results Evaluating Purpose and Calling as a Function of Intervention Condition.

		B 95% CI					
Predictor	*B*	Lower	Upper	β	SE_β	t_β	*p*
Outcome: Sense of purpose							
Constant	2.378	1.749	3.006	2.374	0.320	7.419	>.001***
T1 sense of purpose	0.499	0.362	0.635	0.502	0.070	7.167	>.001***
IGNATE vs. else	0.169	0.020	0.318	0.169	0.076	2.223	.026*
TRAD vs. ADJ	−0.145	−0.400	0.110	−0.145	0.130	−1.116	.265
Outcome: Presence of calling							
Constant	1.254	0.911	1.597	1.256	0.175	7.176	>.001***
T1 calling	0.571	0.460	0.682	0.574	0.057	10.066	>.001***
IGNATE vs. else	0.134	0.029	0.239	0.135	0.054	2.500	.013*
TRAD vs. ADJ	−0.050	−0.222	0.121	−0.050	0.088	−0.573	.567

Note. $N = 127$. SE_β = standard error of the standardized regression coefficient; ADJ = general adjustment condition; TRAD = traditional career exploration condition; IGNATE = Ignatian spirituality–infused condition.
*$p < .05$ level (two-tailed). **$p < .01$ level (two-tailed).

Results

Preliminary Analyses

Assumptions about linearity and normality for our mediators and outcomes were assessed visually by looking at relationship residuals, which revealed normal distributions and linear relationships. To assess equality of variance between conditions for the mediators and outcomes, Levene's test was used. The assumption was violated in one of the 20 imputed data sets for knowledge of occupational information, $F(2, 124) = 3.077$, $p = .049$. With the minimal violation of Levene's test, no statistical corrections were used for analyses including these variables. Finally, to assess the effectiveness of random assignment, we conducted χ^2 tests on the representation of gender, sexual orientation, year in the program, employment status, and race by condition as well as a one-way analysis of variance for age by the condition. Neither set of tests revealed significant differences by the condition. Descriptive statistics and intercorrelations are presented in Table 2.

Purpose and Calling as a Function of Condition

To evaluate the hypotheses that participation in the IGNATE condition would lead to a greater increase in purpose and calling than participation in the TRAD and ADJ conditions, we individually regressed each outcome on orthogonal contrast codes, controlling for the outcome measure at pretest. As shown in Table 4 and Figure 2, results from a hierarchical regression analysis revealed that students in the IGNATE condition reported greater levels of purpose in their postprogram survey than did students in the other two conditions ($B = .169$, $p = .026$). There was an average increase of 0.169 on the 6-point scale for sense of purpose for students in the IGNATE condition compared to others, which contributed to 1.7% to 4.0% of the variance in sense of purpose across the imputed data sets ($\Delta F = 3.225$–7.457, $p = .007$–$.075$).

Likewise, students in the IGNATE condition reported greater levels of calling in their postprogram survey than students in the other two conditions ($B = .134$, $p = .013$), with an average increase of 0.134 on the 4-point scale for calling for students in this condition compared to the others. Across the imputed data sets, adding this comparison to the model contributed an additional 1.5%–4.8% of the variance in the presence of calling ($\Delta F = 3.611$–11.170, $p = .001$–$.060$). Together, these findings suggest that participation in the IGNATE condition activities contributed to statistically significant increases in sense of purpose and calling when compared to the TRAD or ADJ conditions.

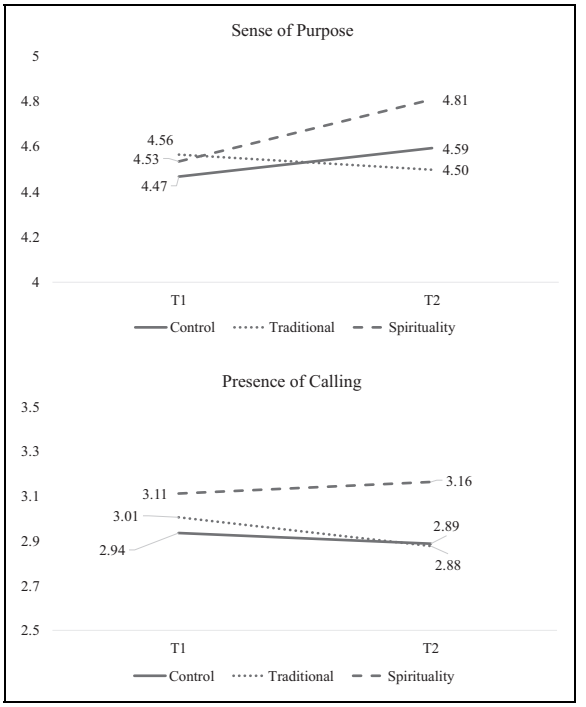

Figure 2. Change in sense of purpose and presence of calling over time by condition.

Assessing Potential Mediators

Mediation hypotheses were tested using recommendations from Hayes (2013), with significance levels calculated using a partial posterior method and confidence intervals calculated using a hierarchical Bayes method (Biesanz et al., 2010; Falk & Biesanz, 2016). Each mediator–outcome relationship was tested individually, controlling for pretest scores on both the mediators and outcomes. As shown in Table 5, results of the mediation analyses using pooled regression estimates from the 20 imputed data sets indicated that there was not a statistically significant indirect effect of career decision self-efficacy or knowledge of occupational information on sense of purpose. There was, however, a statistically significant indirect effect of self-concept clarity on sense of purpose for students in the IGNATE condition compared to the other two conditions, $B_{ab} = .059$, $p = .033$, 95% CI [.001, .131]. These results suggest support for self-concept clarity as a mediator but not for career decision-making self-efficacy and knowledge of occupational information. When assessing these mediation effects for presence of calling (Table 6), there were no statistically significant indirect effects for self-concept clarity, career decision self-efficacy, or knowledge of occupational information.

Discussion

The findings from this study provide evidence in support of the use of spiritual discernment exercises in career counseling. Specifically, using a randomized experimental design over a 10-week period, students who were randomly assigned to participate in Ignatian spirituality–infused career development activities alongside traditional activities ended with greater postprogram scores for purpose and calling than those who engaged in traditional career development activities alone and those who were in the ADJ condition. In other words, findings from the present study suggest that participation in

Table 5. Regression Results for Mediators of Sense of Purpose.

			Hierarchical Bayes 90% CI	
Partial Posterior Indirect Effect	Indirect Effect	*p*	Lower	Upper
Condition → Self-concept clarity → Sense of purpose				
IGNATE vs. Else	.059	.033*	.001	.131
TRAD vs. ADJ	.006	.905	−.097	.110
Condition → Career decision self-efficacy → Sense of purpose				
IGNATE vs. Else	.055	.054	−.004	.127
TRAD vs. ADJ	.006	.904	−.098	.111
Condition → Knowledge of occupational information → Sense of purpose				
IGNATE vs. Else	.001	.887	−.025	.028
TRAD vs. ADJ	.008	.569	−.032	.060

Note. $N = 127$. SE_β = standard error of the standardized regression coefficient. ADJ = general adjustment condition; TRAD = traditional career exploration condition; IGNATE = Ignatian spirituality–infused condition.
*$p < .05$ level (two-tailed). **$p < .01$ level (two-tailed). ***$p < .001$ level (two-tailed).

Table 6. Regression Results for Mediators of Presence of Calling.

			Hierarchical Bayes 90% CI	
Partial Posterior Indirect Effect	Indirect Effect	*P*	Lower	Upper
Condition → Self-concept clarity → Presence of calling				
IGNATE vs. Else	−.001	.811	−.023	.018
TRAD vs. ADJ	−.000	.988	−.019	.019
Condition → Career decision self-efficacy → Presence of calling				
IGNATE vs. Else	.019	.081	−.004	.054
TRAD vs. ADJ	.002	.863	−.041	.047
Condition → Knowledge of occupational information → Presence of calling				
IGNATE vs. Else	−.000	.946	−.012	.011
TRAD vs. ADJ	.000	.919	−.020	.022

Note. $N = 127$. SE_β = standard error of the standardized regression coefficient. ADJ = general adjustment condition; TRAD = traditional career exploration condition; IGNATE = Ignatian spirituality–infused condition.
*$p < .05$ level (two-tailed). **$p < .01$ level (two-tailed). ***$p < .001$ level (two-tailed).

spirituality-infused activities alongside traditional activities was a more way to cultivate calling and purpose than participation in traditional career development activities alone.

For individuals in the IGNATE condition, the relationship between the intervention and one's sense of purpose was noticeably more pronounced than those in the traditional or ADJ condition. These findings suggest that active engagement in spiritual discernment practices can better enable individuals to feel a sense of purpose. The same pattern held when looking at presence of calling as well. Students who participated in these activities had noticeably higher postintervention scores for the presence of calling than those in the traditional career development or ADJ condition. Notwithstanding, when examining the simple slopes for this particular finding, it is apparent that individuals in the spirituality-infused condition did not necessarily experience stark increases in presence of calling; instead, slight increases for those individuals coupled with slight decreases for those in the other conditions created the significant effect.

We also assessed self-concept clarity, career decision self-efficacy, and knowledge of occupational information as potential mediating mechanisms to purpose and calling. The results of the present study suggest that self-concept clarity plays an important role in the use of career counseling interventions

for sense of purpose. The significant indirect effect of participation in the Ignatian spirituality–infused activities on one's sense of purpose through self-concept clarity suggests that those who engage in the aforementioned activities related to spiritual discernment experience greater change in their self-concept clarity. This change then predicts subsequent gains in their sense of purpose, a finding that aligns well with prior research on the role of self-concept clarity and existential outcomes (Adam et al., 2018; Shin et al., 2016).

Perhaps the most similar comparison of career development approaches comes from Dik and Steger (2008) who evaluated two career development programs—one grounded in person–environment fit theory and another they termed as "calling-infused." Their research found that a calling-infused approach did not outperform a person–environment fit approach for outcomes like worldview and meaning in life. However, the present study employed similar calling-infused language and grounded it in a spiritual discernment framework from St. Ignatius, finding that discernment of calling within spiritual discernment activities is a more effective approach to fostering outcomes like purpose and calling than traditional career development approaches alone. These findings offer several implications for career development practice and theory.

Implications for Practice

One of the more salient implications from this study is that spiritual discernment shows potential for fostering a sense of purpose and calling. The spiritual discernment activities used in this program included (a) 5-day daily contemplative prayer exercise designed to encourage reflection on important emotions and thoughts throughout the day, (b) an activity for students to find "sabbath" or rest by detaching from life stressors or distractions that make thoughtful reflection more challenging, and (c) three activities providing instruction and reflection questions on discernment. These activities were informed by Ignatian spirituality principles and were designed to encourage students in a deep reflection on their experiences and what they find meaningful. Consequently, our findings align closely with the literature on the importance and role of meaning as a centerpiece for purpose and calling (Damon et al., 2003; Dik & Duffy, 2009).

Another practical implication of the present study is its affirmation of the use of best practices for career development suggested by Brown and Krane (2000). Specifically, the use of written exercises, individualized feedback, modeling, occupational information, and support-building were all incorporated into the spiritual discernment exercises program. These characteristics were more salient in the IGNATE condition than in the TRAD condition simply from having more interaction with the career counselors implementing the program. It may be difficult to point to any one of these ingredients as the source of increases in vocational outcomes over time, but at a minimum, the findings from this study affirm the use of Brown and Krane's (2000) suggested practices in vocational counseling.

Finally, this study also surfaces a statistically significant indirect effect of self-concept clarity on sense of purpose, which suggests that engaging in spiritual discernment to develop one's sense of purpose works through a process of building clarity about one's identity. This finding aligns with the career construction theory perspective (Savickas, 2013) and is important for practitioners designing and implementing future career development programs. In particular, practitioners creating such programs may benefit from intentionally designing and facilitating activities that foster self-concept clarity through reflection and introspection. Findings from this study also present theoretical implications for career counseling research as described below.

Theoretical Implications for Future Research

In their prior work describing how the concept of calling fits within current theoretical perspectives in vocational psychology, Dik et al. (2009) suggested that new theoretical perspectives are not necessary

for the study of calling in career development interventions. Rather, they noted that calling-infused approaches to career development could be easily integrated into existing theoretical paradigms. The findings from the present study do not contradict this perspective but raise questions about whether past theoretical paradigms are sufficient for calling-infused approaches when those approaches leverage the richness of spiritual discernment. In other words, existing career development theories may not only rule out spiritual discernment but also do not create much space for it in the cultivation of calling and purpose.

Specifically, existing theories of career development do not discuss the role of a transcendent summons in shaping one's vocation; neither do they give much guidance on healthy and effective methods for exploring and interacting with the transcendent or offer explicit recommendations for which spiritual values or traditions may be healthy or unhealthy for guiding one's discernment. This raises a question then of what components would comprise a spirituality-based career development theory. One suggestion from the present study is the use of spiritual principles or a spiritual discernment framework to guide discernment. In this study, five principles from the Ignatian tradition were used to guide the career development activities. These values were (a) detachment from that which prevents discernment, (b) encouragement of being contemplative in action, (c) the belief that the transcendent is fully present in reality, (d) the view that the transcendent is compassionate to one's lived experience, and (e) the encouragement of balancing spiritual discernment with pragmatic decision making. Future research on these values or other frameworks may reveal further insight into spirituality's role in career discernment.

In addition, this study's findings suggest that further research is needed about the mediating mechanisms underlying the role of spirituality in career development. In this study, self-concept clarity mediated the relationship between Ignatian spiritual discernment practices and a sense of purpose. This raises questions about how we understand self-concept clarity as a mechanism to explain the effect of spirituality-infused career development on vocational outcomes. From a self-determination theory perspective (e.g., Ryan & Deci, 2000), perhaps clarity empowers individuals to feel ownership in their discernment, meaning there may be additional mechanisms such as autonomy or psychological ownership that underlie the spiritual discernment process. Equally interesting is the finding that other mediators failed to significantly mediate the relationship between Ignatian spirituality–infused career development and a presence of calling. There are many reasons why a mediator may be statistically nonsignificant, but overall, alternative causal models with new and different mediators are both warranted and necessary for understanding how spirituality-infused career development can best serve its users.

Limitations

Several limitations should be considered when interpreting the findings from this study. First, the career development intervention evaluated here was administered in university courses that were required of students, creating an incentive structure that could have demotivated and mitigated the impact of the intervention. Another limitation of the present study is the potential for treatment diffusion whereby students could have discussed and shared elements of the intervention in other domains of their social lives. The third limitation was the mode of implementation for this program; it is likely that students experience stronger gains in calling and purpose from longer and in-person modes of career development. Overall, while these limitations are not ideal, they each would have likely mitigated the observed effect, not enhanced it. For that reason, they are not reasons for skepticism about the presented findings but rather for future study on the use of spirituality-infused approaches to ascertain the true magnitude of the effect.

Concluding Thoughts

Results of the current study contribute to career development research and practice by offering evidence about the impact of Ignatian spirituality–infused practices for fostering a sense of purpose and

calling for emerging adults in higher educations. Findings from this research suggest that, when providing vocational care or counseling to emerging adults discerning career paths, a holistic approach that incorporates spiritual exercises (e.g., discernment, meditation, prayer, and reflection) alongside more traditional exercises facilitates the greatest impact one's sense of purpose and calling.

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Lynette H. Bikos, PhD, ABPP, has a doctorate in counseling psychology from the University of Kansas. She is currently a professor of teaching statistics, research methods, and psychometrics in the Departments of Clinical and Industrial-Organizational Psychology at Seattle Pacific University. Administratively, she holds the role associate dean for research in SPU's School of Psychology, Family, and Community. Her research interests fall at the intersections of vocational, global, and sustainable psychology. During the COVID-19 pandemic (when not tethered to her laptop), she found joy in sewing nearly 600 face masks with her daughter and riding her bicycle.

Dana L. Kendall, PhD, has a doctorate in industrial-organizational psychology from the University of Central Florida. She is currently an associate professor teaching doctoral-level statistics, research methods, program evaluation, and selection and performance management in the Department of Industrial-Organizational Psychology at Seattle Pacific University. Her research interests are centered on fostering inclusivity and fairness in the workplace through mentoring and strengthening worker rights through democratic decision making, employee ownership, and transparency policies. Her hobbies include dancing, yoga, knitting, and reading across multiple disciplines.