Make Your Work Matter is a new, brief intervention designed to help adolescents explore, discover, and enact a sense of purpose in their early career development.

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Make Your Work Matter:
Development and pilot evaluation of a purpose-centered career education intervention

Bryan J. Dik, Michael F. Steger, Amanda Gibson, William Peisner

INITIATING AND FOSTERING a sense of purpose has substantial developmental importance for adolescents. There has been uniform agreement that purpose is desirable, but little agreement on what the term means. The conceptualization of purpose offered by Damon, Menon, and Bronk² was instrumentally influential in developing the components of the purpose-centered career education intervention described in this article. Damon and colleagues' definition shares common ground with others in conceiving of purpose as a far-reaching goal, or ultimate concern, that people endow with personal significance, importance, and meaning. However, for Damon and colleagues, a purpose also needs to be rooted in beyond-the-self concerns.

This additional prosocial dimension may be particularly apt in the career domain, as it dovetails with centuries of thinking about work as a calling. The scholarship on calling often draws from philosophical and theological foundations; notably, Damon and colleagues reached similar conclusions by drawing from the developmental literature. Erikson and Piaget identified the establishment of identities and self-concepts as the critical developmental task in adolescence. Damon, Menon, and Bronk suggested that in confronting this task, adolescents begin to dedicate themselves to abstract beliefs and purposes; that is, they perceive needs beyond themselves and conceive of a purpose that can serve those needs or benefit others. Despite the developmental relevance of purpose, however, little is known about the extent to which it is possible to cultivate a sense of purpose among middle school students using school-based interventions.

Career education programs represent one type of school-based intervention. Such programs are designed to help students establish ideas for using their abilities and interests in their future careers, with a goal of building a satisfying life.⁷ Given the importance of work to the establishment of an enduring sense of purpose, the future orientation inherent in adolescent career development, and the embeddedness of early career education programs in many middle schools, such programs may represent an important opportunity to help students explore, identify, and engage a sense of purpose.⁸ This article describes Make Your Work Matter, a brief, purpose-centered career education intervention under development, and reports results from a pilot study evaluating its effectiveness.

The goal of cultivating a sense of purpose in career development fits within a broader context of research on the role of purpose in life generally and in work specifically. Purpose bridges present experience to future aspirations and experiences. Research often links purpose with meaning in life and finds that people who believe their lives have meaning and purpose are happier and experience fewer psychological problems than those without a strong sense of meaning and purpose. Those who view their careers as

an avenue for expressing purpose tend to be more deeply engaged in their work, more effective team players, more committed to their occupations and organizations, and more satisfied than those without a purpose orientation.¹¹ Often meaning and purpose at work take the form of a calling—a summons to a particular career in which purpose at work and purpose in life align in the service of a greater good.¹² People with a sense of calling report both career-related and general well-being benefits, including—for those still preparing for their careers—greater career decision self-efficacy, intrinsic work motivation, and meaning in life, as well as greater commitment to their careers, team members at work, and their employer.¹³ Thus, melding Damon and colleagues' ideas about purpose with calling theory creates a powerful mix of meaning, purpose, and career aspirations.

Kosine, Steger, and Duncan proposed a purpose-centered, strengths-based approach to career development among adolescents.14 They proposed five key factors in the cultivation of purpose in early career development. The first, identity, is present as adolescents clarify their interests and project a sense of self onto their future career. Identity formation is encouraged through opportunities for career and personal exploration, through such points of intervention as interpretation of vocational interest inventories and small group discussions that explore topics related to goals and aspirations. The second, self-efficacy, refers to a person's belief that she or he can effectively complete a particular task.15 Self-efficacy often is studied within specific life domains. Career decision self-efficacy, for example, refers to the belief that one can effectively navigate the career decision process by gathering needed information about the self and the world of work for use in making informed choices. It is associated with vocational identity, career decidedness, hope, goal stability, and positive affect.16 Kosine and colleagues suggest that self-efficacy can be increased by helping students identify academic and work-related strengths and potential career paths that would capitalize on those strengths. The third factor, metacognition, refers to self-awareness of one's own thought processes.¹⁷ Metacognition is advantageous in career development and is encouraged by helping students reflect on their cognitive processes and articulate effective strategies for making wise decisions and making those decisions wisely. ¹⁸ Fourth, culture, which plays a key role in purpose-centered career development, refers to one's demographic uniqueness (for example, gender, ethnicity, socioeconomic status, disability) and how these factors influence career choices. Kosine and colleagues' approach assumes that such factors help shape which careers students will perceive as providing a sense of purpose and should be targeted by interventions that explore how career choices affect cultural values and vice versa. ¹⁹ Finally, service for the greater good and recognition of how one's career contributes to society is a key component of purpose-centered career development. Kosine and colleagues recommend helping students recognize the importance of giving back through their careers. ²⁰

Development of a purpose-centered career intervention: Make Your Work Matter

Make Your Work Matter is a three-module enhancement to traditional career development activities designed to promote a sense of purpose in the early career development of adolescents. Traditional career development for adolescents consists of self-assessments of interests and skills, exploration of occupational information, and goal-setting activities, tasks that help address four of the five factors in Kosine and colleagues' model: identity, self-efficacy, metacognition, and culture. Make Your Work Matter augments traditional career development activities in that it also targets these four factors but emphasizes the fifth factor: service. The three modules are a parent interview, a values card sort, and the One Village Game.

Parent interview

In this module, students conduct a thirty-minute structured interview of a parent or other trusted adult. The interview is designed

to stimulate parent-child conversation and thought about the role of work in the context of life. Ideally this interview provides the base for future conversations, aiding adolescents in exploring such factors as identity, self-efficacy, and an appreciation of their unique cultural heritage. Questions include: "Does your work fit well with your values? Please explain." "In what ways does your work impact other people or the community? How does it make you feel when you think about this?" and "What advice can you give me about my future career?"

Values card sort

This module, adapted from the O*NET's Work Importance Locator (WIL), is an individually administered classroom activity designed to introduce students to the concept of work values and facilitate reflection on core work-related values and their implications for career exploration and choice.²² Reflecting on values provides additional opportunities for adolescents to explore identity and culture and may also facilitate metacognition about personal preferences and tendencies.

For many adolescents, service may emerge as an important value. Modifications from the original WIL included more accessible language, a simplified administration procedure, and recasting the card sort as a vehicle for reflection rather than as an assessment instrument.

Students are given twenty cards, each with a work-related need statement (e.g., "I could try out my own ideas," "My co-workers would be easy to get along with," "I could give directions and instructions to others"). They engage in a simple sorting task in which they rank their five most important career values. Finally, they participate in a reflection activity requiring them to imagine a career in which their top values are consistently satisfied.

One Village Game

The One Village Game is a board game designed to encourage students' thinking about the social function of occupations. The game, developed to target the idea of service, builds on the

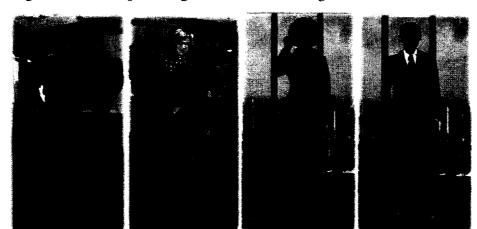


Figure 4.1. Sample images from One Village Game cards

assumption that the full range of honest areas of work is important for a well-functioning village, providing the full range of jobs with meaning and dignity. Students divide into teams and begin the game by using a variety of strategies to select eight cards, each with a woman or man in one of twelve occupations representing the full scope of prestige, educational level, and income level (Figure 4.1 provides examples). Each team presents their eight cards, which comprise the professions in that village, and evaluates how well that combination of workers will serve the village and what core village needs will remain unmet. Teams then participate in a "job fair" in which they can trade and obtain new cards, with the goal of a more balanced village that meets more needs.

The game's purpose is to provide a tangible means of communicating how the common needs of the village are best met by mutual service among the wide range of professions, and to illustrate how every profession plays an important role in ensuring the well-being of the village as a whole.

The pilot study

Theory and research suggest that finding a purpose derives from the processes of identity and cognitive development. For many adolescents, developing a self-concept and the ability to think abstractly about the future might arise readily and be easily put to work in developing a purpose. For many others, however, putting these factors together might pose a significant challenge. Few resources are available that assist young people in engaging with the issue of how they can use their talents, energy, and idealism to serve a greater purpose.

We initiated this engagement process by providing resources to a group of adolescents in an intuitively important context: the career education program in their school. This article reports an initial pilot test of a school-based intervention designed to help adolescents explore, discover, and enact a sense of purpose. Our aims were twofold:

- To evaluate whether students participating in the intervention, relative to a quasi-experimental control group, experience improved career development outcomes and a stronger sense of purpose, both of which we hypothesize to be the case
- To collect qualitative (focus group) evaluative data useful for revising and improving the intervention

Method

Participants

The participants were seventy-six eighth-grade students (63 percent girls), with a mean age of 13.88 years (SD = .47). Approximately two-thirds (64.5 percent) self-identified as white/European American; 14.7 percent were Latina/o, 1.3 percent were Asian, and 19 percent were multiracial or other. This approximated the distribution of ethnicity in the school and broader community. Participating students provided informed consent, and implicit parental consent also was obtained according to Institutional Review Board–approved procedures.

Procedure

A quasi-experimental design was implemented in which students were assigned to the intervention or control condition based on

their membership in one of four sections of eighth-grade English. Students in all four sections had received traditional career education as seventh graders: group interpretation of interest and selfreported skills inventories, exploration of occupational information, and goal-setting exercises. Those in two class sections (the intervention group, with thirty students) also participated in the Make Your Work Matter modules, whereas those in the other two sections (the control group, with forty-six students) participated in standard English curricula that did not include a career unit. The modules were implemented over the course of one week. All participants completed a preintervention and postintervention questionnaire. Finally, ten students from the intervention group, selected by the school counselor to be roughly representative of the eighth-grade cohort, participated in a thirty-minute followup focus group in which a structured group interview was facilitated.

Instruments

Because of classroom time constraints and the purpose of the pilot study as an initial evaluation of the intervention, the decision was made to assess pre- and postintervention attitudes using a wide-bandwidth, low-fidelity measurement approach. Therefore, eighteen single-item scales were used to assess a broad range of career development and purpose-related beliefs with a rating scale ranging from 0 = absolutely untrue, to 100 = absolutely true. Eleven openended questions also were administered; the first two assessed students' learning outcomes (for example, "What were the three most important things you learned about your career this week?"), and the remaining nine assessed what students liked, learned from, and would change regarding each of the three modules in the intervention.

Results

Univariate analysis of covariance, with preintervention scores entered as covariates for postintervention scores, was used to examine the intervention effects. Because of the nature of the study as a pilot evaluation of an intervention under development, paired with a sample size that placed a low ceiling on statistical power, we opted to err in the direction of minimizing Type II errors by using a *p*-value cutoff of .10 without controlling for family-wise error. Results suggested that relative to the control group, the group participating in the Make Your Work Matter intervention reported a clearer sense of direction in their careers (F = 3.28, p = .07, partial $\eta^2 = .04$), a greater understanding of their interests (F = 5.77, p = .02, partial $\eta^2 = .07$) and strengths and weaknesses (F = 7.54, p = .01, partial $\eta^2 = .09$), and felt more prepared for the future (F = 12.67, p = .001, partial $\eta^2 = .15$). Curiously, they also reported a stronger desire for wealth in their future careers (F = 3.18, p = .08, partial $\eta^2 = .04$).

No other substantive differences were found between groups, including on items that directly pertain to a sense of purpose, calling, or prosocial attitudes. An analysis of responses to the openended questions revealed that most students appeared to understand the purpose of the modules; many expressed career goals incorporating meaningfulness, purpose, calling, and prosocial attitudes and behaviors; and most students expressed that they enjoyed the intervention.

Evaluative data from the focus group were transcribed and analyzed using Johnson, Dunlap, and Benoit's semiquantitative coding strategy for organizing data, which consists of identifying and labeling important themes, then categorizing them based on their relative frequency.²³ Three primary themes emerged in the focus group. First, students tended to exhibit considerable confidence in their current career decision. That is, when asked to describe their career plans, each identified a specific occupation with little hesitation, often even articulating specific universities that could help them pursue their paths. Second, students described enjoying the process of exploring their values through the card sort activity and said that it helped clarify their wants and needs in a career. One student's comment was representative: "It helped me decide what I liked." Although feedback was positive for the parent interview

and the One Village Game (for example, "Yeah, that was kind of fun. Our village was perfect."), students found the card sort particularly helpful and indicated that exploring their values and clarifying their strengths and weaknesses was a highly valued outcome. The third theme was that although students indicated that they had already spent time (prior to the intervention) thinking about potential career paths, the intervention helped bring more specific career trajectories into focus, while also yielding information useful for greater self-understanding. One student illustrated this theme: "I knew the jobs I wanted to do, but I guess I just learned more about myself" from participation in the intervention.

Discussion

Although cultivating a sense of purpose is developmentally salient and desirable for adolescents, no interventions (of which we are aware) prior to Make Your Work Matter have been developed and tested that seek to help facilitate a sense of purpose. Results of the pilot study indicated that students participating in a purpose-centered intervention embedded in a career education curriculum, relative to a comparison group that participated in traditional career education only, experienced meaningful improvement in career development attitudes. Specifically, they reported a clearer sense of direction, a better understanding of their interests and strengths and weaknesses, and a greater level of preparedness for the future. These variables are related to Kosine and colleagues' factors of identity, self-efficacy, and (to a lesser extent) metacognition and culture.²⁴ Participants also reported a stronger desire for wealth, counter to our expectations. This result may reflect a deeper level of achievement motivation than was present among students who participated in traditional career development only; alternatively, the emphasis on finances and economic desires may have been a natural result of reflecting on one's future career in contrast to the control group, which engaged in an English

curriculum between pre- and postintervention assessments. A third option is that students' desire for wealth may reflect a prosocially oriented value for philanthropy. Of course, it is possible that aspects of the intervention may have had an opposite effect of what was intended in this regard. The study unfortunately did not assess these four possibilities; further evaluation of the intervention, should this result replicate, should do so.

Surprisingly, no differences were found between the groups on items pertaining more directly to a sense of purpose, calling, or prosocial attitudes. There are several reasons that this might be the case. Methodologically, it is possible that our coarse measures of these outcomes and small sample size failed to provide a level of power sensitive enough to detect differences, despite our efforts to minimize Type II errors. It also is possible that a sense of purpose develops more gradually than would be detected with a postintervention survey administered immediately after the intervention. By not following participants over time, the study cannot assess the possibility that the intervention may help lay a foundation for a sense of purpose that emerges further down the causal chain. Of course, the interventions may not have addressed purpose-catalyzing factors at a sufficient level of depth. However, these null results should be considered in light of students' answers to the open-ended questions, which revealed that students understood what the intervention modules were intended to convey and expressed goals that incorporated meaningfulness, purpose, calling, and prosocial attitudes. Students also expressed enjoyment of the intervention.

Participants in the focus group provided another layer of insight regarding the strengths and weaknesses of the intervention. The result that students had identified specific careers and expressed confidence in their plans to pursue those careers indicates that the intervention may have helped solidify and reinforce their career choice aspirations. This is a favorable outcome, but it must be weighed against research indicating that vocational interests fluctuate in early adolescence, suggesting that aspirations are best held tentatively by students as they engage in a continual process of

exploring the range of occupational opportunities.²⁵ Students also expressed that the values card sort in particular was engaging and useful and that the intervention as a whole provided information that contributed to their self-understanding.

Limitations

The pilot study suffered from limitations typical of any small-scale effort to provide an initial evaluation of a new intervention: a small sample size providing low statistical power, a measurement strategy assessing a broad array of attitudes but without considerable depth or psychometric support, and the use of a quasi-experimental design rather than a true experiment. Because of these factors, results from this study should be considered tentative.

Implications for practice

The results provide useful practical information. For example, based on these results, we are modifying Make Your Work Matter in several ways. First, the parent interview is being revised to encourage a deeper and more thorough level of integration with the rest of the curriculum. Parental involvement has been shown to play an important role in early career development, and we encourage taking deliberate steps to encourage and facilitate such involvement.²⁶ Second, clearer instructions are being developed to improve the administration of the values card sort activity. As the focus group revealed, this activity was particularly beneficial for students in terms of exploring and clarifying their work values. We urge educators to engage their students in such exploration, with the caveat that work values card sorts are best used as an exploration tool with adolescents rather than as a formal assessment of work values, given their limited work experience. Third, more streamlined rules and clearer objectives are being developed and tested for the One Village Game. Finally, in-class writing assignments are being implemented to facilitate a deeper and more structured and coherent integration and application of thematic lessons learned across the intervention's three modules. Writing is useful in drawing themes and providing coherence to the

experience, and furthermore provides a visual reminder of the lessons learned as articulated in the students' own words. The results from this study are useful in developing enhancements to the curriculum, but also highlight specific strategies educators can implement to encourage the purpose-centered career development of their students.

To summarize, practitioners should consider the following strategies:

- Give young people structured ways of getting their parents involved in discussions about career expectations and the idea of meaningful and purposeful work.
- Help young people explore their work values, as we did with our values card sort.
- Look for opportunities to engage young people in conversations about the dignity and interconnectedness of all honest occupations.

Implications for research

The pilot study also lays the groundwork for a large-scale, multischool trial of the improved intervention, using psychometrically supported measurement instruments, that tracks participants longitudinally to provide an appraisal of the longer-term effects of the intervention. Research also can examine each component of the intervention, along with other intervention strategies, using a translational research approach.²⁷ The result that the intervention improved career development criterion variables more so than criterion variables more directly related to a sense of purpose raises the question of how these sets of outcomes are related. Kosine and colleagues framed vocational identity, self-efficacy, metacognition, and culture as key components of a sense of purpose in career.²⁸ Their fifth factor, service, is most directly related to typical means of conceptualizing purpose. Basic research is needed that investigates how these factors develop, relate to each other, and work in concert to promote a sense of purpose. Results from such research would serve to inform this and other intervention strategies.

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BRYAN J. DIK is associate professor of counseling psychology at Colorado State University.

MICHAEL F. STEGER is associate professor of counseling psychology and applied social psychology, and director of the Laboratory for the Study of Meaning and Quality of Life, at Colorado State University. He is also affiliated with North-West University in South Africa.

AMANDA GIBSON is a 2011 graduate in psychology from Colorado State University.

WILLIAM PEISNER is a school counselor at Wellington Middle School in Wellington, Colorado.