Moving Past Barriers to Career Success: Understanding the Difference that Career Services Makes

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What We Know: College students experience environmental influences that can both hinder (barriers) and help (supports) them as they make and implement career choices.

What’s Missing: Barriers. While barriers are well categorized by past literature (e.g., financial pressures, conflicts between multiple life roles), the process by which students interpret and act upon these influences is not well understood, resulting in conflicting study results and stereotyping. Supports. While decades of career development research has demonstrated that career interventions generally support college students, few conclusions can be drawn regarding the types of interventions that are particularly helpful to students due to: (a) short-term interventions that employ short-term data collection, and (b) quantitative approaches that demonstrate changes, but lack information regarding why or how these changes occur.

Purpose: Examines the influence that individual career counseling, as an environmental support, has on first-year college students’ perceptions of academic and career barriers. Changes in perceived barriers over students’ first academic year are explored, with consideration of how career counseling contributed to changes.

Research Questions: Do students who participate in individual career counseling experience a greater change in the magnitude of perceived career barriers than those expected due to maturation, as demonstrated by the control group?

What influences do students perceive individual career counseling to have on their perceptions of career barriers?

Study Design: Participants. Students enrolled in a mandatory exploration course for those who enter “Midwest University” with a status of an “undecided major.” 812 students invited, 305 (38%) chose to participate. Participants were randomly assigned to the treatment (60 students) and control (245 students) groups for the study.

Data Collection Timeline. Surveys and interviews were conducted at three times: (a) prior to the treatment, (b) two to four weeks after the treatment, and (c) five to six months after the treatment.

Surveys. Surveys were conducted online and included:
- Demographic form
- Career Barriers Inventory – Revised (CBI-R; Swanson, 1995)

Interviews. Interview participants were purposefully selected based on responses to the first round survey, striving for a wide variety in survey instrument results. 76 interviews with 29 students (19 treatment group, 10 control group). Interviews followed a semi-structured interview guide, and addressed: (a) current major and career choices, (b) perceived environmental barriers and supports, (c) experiences with career services, and (d) other experiences that influence major and/or career choice.

Treatment. The career counseling treatment consisted of a three-part experience:
- an initial career counseling appointment
- a performance accomplishment task to actively explore majors and/or careers
- a second career counseling appointment to reflect on progress and next steps
Survey Analyses:

**ANOVA Analyses of Career Barriers Inventory-Revised (CBI-R) Total Scores**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>CBI-R Total Score</td>
<td>Between Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Experimental Groups</td>
<td>4.78</td>
<td>1</td>
<td>4.78</td>
<td>2.28</td>
<td>.134</td>
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<tr>
<td></td>
<td>Error</td>
<td>264.55</td>
<td>126</td>
<td>2.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within Subjects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Survey Time</td>
<td>4.18</td>
<td>2</td>
<td>2.09</td>
<td>7.86</td>
<td>.000***</td>
</tr>
<tr>
<td></td>
<td>Survey Time × Experimental Groups</td>
<td>1.71</td>
<td>2</td>
<td>0.85</td>
<td>3.21</td>
<td>.042*</td>
</tr>
<tr>
<td></td>
<td>Error</td>
<td>67.01</td>
<td>252</td>
<td>0.27</td>
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</tbody>
</table>

*p < .05, ***p < .001.

Survey analyses demonstrated that significant differences in perceived barriers were not found between the treatment and control groups on any single survey administration (no main effect for experimental groups), suggesting that the experimental groups began and ended with similar perceptions regarding the likelihood of encountering career barriers.

**Paired Samples T-Tests Examining Career Barriers Inventory-Revised Total Scores Across Survey Times**

<table>
<thead>
<tr>
<th>Group</th>
<th>Survey Comparison</th>
<th>Mean Difference</th>
<th>SD</th>
<th>df</th>
<th>t</th>
<th>p*</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Pre vs. Post</td>
<td>-0.03</td>
<td>0.72</td>
<td>129</td>
<td>-0.49</td>
<td>.623</td>
<td>0.03</td>
</tr>
<tr>
<td>Participants</td>
<td>Pre vs. Delayed Post</td>
<td>-0.25</td>
<td>0.71</td>
<td>127</td>
<td>-3.90</td>
<td>.000***</td>
<td>0.27</td>
</tr>
<tr>
<td></td>
<td>Post vs. Delayed Post</td>
<td>-0.20</td>
<td>0.78</td>
<td>127</td>
<td>-2.88</td>
<td>.005**</td>
<td>0.20</td>
</tr>
<tr>
<td>Control</td>
<td>Pre vs. Post</td>
<td>0.07</td>
<td>0.72</td>
<td>96</td>
<td>0.93</td>
<td>.353</td>
<td>0.05</td>
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<tr>
<td></td>
<td>Pre vs. Delayed Post</td>
<td>-0.20</td>
<td>0.72</td>
<td>94</td>
<td>-2.67</td>
<td>.009**</td>
<td>0.21</td>
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<td>Post vs. Delayed Post</td>
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<td>0.81</td>
<td>94</td>
<td>-2.96</td>
<td>.004**</td>
<td>0.25</td>
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<td>Treatment</td>
<td>Pre vs. Post</td>
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<td>0.63</td>
<td>32</td>
<td>-2.95</td>
<td>.006**</td>
<td>0.36</td>
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<tr>
<td></td>
<td>Pre vs. Delayed Post</td>
<td>-0.39</td>
<td>0.69</td>
<td>32</td>
<td>-3.24</td>
<td>.003**</td>
<td>0.45</td>
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<tr>
<td></td>
<td>Post vs. Delayed Post</td>
<td>-0.06</td>
<td>0.68</td>
<td>32</td>
<td>-0.53</td>
<td>.600</td>
<td>0.07</td>
</tr>
</tbody>
</table>

*Significance values for the two-tailed test are presented. Significance is indicated only for tests found to be significant in comparison with the Bonferroni corrected alpha (.05/3 = .017).

**p < .01, ***p < .001

However, treatment group participants experienced a decrease in perceptions of likelihood of encountering career barriers between the pretest and posttest, but not the posttest and delayed posttest. This suggests that gains observed immediately after the intervention were maintained, but did not increase, over the second college semester.

For the control group, decreases in perceived barriers were observed during the second college semester only – not during the first college semester.

It seems, based on these interaction effects analyses, that participants in the treatment group experienced decreases in perceived career barriers earlier in their first college year than did control group participants, and those earlier decreases could be reasonably attributed to the treatment.
Interview Analyses:

I. When students made progress addressing academic and career barriers, what contributed to that progress?

A. Removing barriers by choosing a different academic or career path
B. Redefining how one thought about the barrier(s)
C. Taking action to diminish the barrier(s)
   i. Performance accomplishment activities
   ii. Developing coping strategies
   iii. Making firm commitments

II. What contributions did students perceive individual career counseling made to their progress addressing academic and career barriers?

Redefining Barriers
For some students, simply changing the way that they thought about a potential barrier was enough to facilitate moving past struggles and toward implementing academic and career choices. Interactions with career counselors could play an important role in the process of reinterpreting barriers.

For example, consider these excerpts from interviews with Adam (treatment group, White, male, 18 years old)

Pre-test interview, talking about making a choice of an academic major or career.

I feel like it’s a lot on me. I’ve got to figure out what I need to do. What concerns me the most is not being satisfied with the choice I make. I want to be confident that the career I choose is right for me and will make me happy throughout my life. I do not want to go through life being miserable and forcing myself to go to a job I hate everyday. … Knowing that I am not locked into anything I first choose. It will also be nice to know that whatever I choose to study is really what I want. I hope I can find my perfect major!

Post-test interview, talking about making a choice of an academic major or career.

[I feel] a lot more confident … all of those options that I was thinking about before would be fine for me if I do go into it. … I’m not nervous or feeling pressured anymore.

[My career counselor] basically told me that I was in a real good position compared to a lot of people who still aren’t sure. And she basically gave me confidence, and I know what I’m doing now. I have my options. I know what I want to get into. I know what classes I need to take. So since I have that under my belt, she was like I’m going in a good direction. So that’s why I feel more comfortable now.

Taking Action – Performance Accomplishment Activity
Within their reflections, 11 of the 15 treatment group participants who also participated in the research interviews made direct references to engaging in performance accomplishment activities when discussing how individual career counseling contributed to their ability to engage confidently in career decision making. Approximately half of the treatment group participants reflected that the most helpful aspect of their career counseling experience was engaging these activities. They appreciated both the “extra push” to try a career-related task (e.g., exploring careers that related to majors, writing a resume, attending a meeting of an academic student organization) and the opportunity to discuss their experiences with a career counselor afterward. This structure of embedding performance accomplishment activities within the individual career counseling experiences provided students with two types of feedback on their actions: (a) personal reflections on their performance, and (b) insights from a career counselor who could help deepen understanding of their experience, make comparisons with peers, and discuss potential next steps (Makela, 2012).
For example, consider these excerpts from interviews with Denise (treatment group, Black/African American, female, 18 years old)

Pre-test interview, talking about making a choice of an academic major or career.

*I’m not willing to jump in yet …* My only concern is just not liking the major and end up wanting to switch majors. *I really don’t want to switch majors* … I want to stick with that one major and go through it because I know when you start switching majors and you stay in school for five years and longer. I’m not doing that. … *Extra time is extra money,* which is *more pressure on my mother,* in particular. My mom is single. If not her, then I have to take out loans and stuff like that. *I’m trying not to take out extra loans.*

Post-test interview, reflecting on performance accomplishment activity of developing her resume and how this informed her ability to make a choice of an academic major.

*I think [the career counselors] just kind of help you stay on track* … [Doing my resume] was more of like okay, these are my experiences, and *reminded me of what I’ve done and also let me know what I should do* or if I want to join more programs or just do more within the program I’m in, that kind of thing. So I think it made a difference.

*[The career counselor] said he thinks I’m pretty much on track, so I think that was pretty good to hear because I was worrying. But he said as a freshman I’m doing pretty well . . . It felt good to hear that. Sometimes you just kind of doubt yourself,* especially in a large university like this.

**Taking Action – Coping Strategies**

Following their individual career counseling experiences, a number of participants expressed that their concerns about academic and career barriers were diminished due to increased understanding of supports available in their college environment, both from career services and in other areas across campus.

For example, consider these excerpts from interviews with Kari (treatment group, Latina, female, 18 years)

Pre-test interview, talking about making a choice of an academic major or career.

I really think I want to do a Kinesiology major. It’s just I’m a people person, I love working with people … People trust me, and I just create these relationships. Through physical therapy, you have to have those one-on-ones and just helping people … Kinesiology,, it has a lot of different areas I could go into like teaching, going to training, there’s just a lot of options there.

But, *it's going to be tough for me.* Class wise, if I don’t really understand the material or it’s impossible for me, because *science and math are not my strongest areas,* and I know those are very important in many majors. … *Even though I’m bad at science, I like biology* … I heard Kinesiology, *they're really hard taking people* in because it’s so popular.

Post-test interview, reflecting on the resources that she learned about through her career counseling appointments, and her renewed sense of confidence that she can pursue the major in which she is interested.

Instead of just thinking about it, *[the career counselor] had me do homework, I guess you could say.* …

It’s still concerning, but I feel like *there’s a lot of resources to help me.* … *[My career counselor] told me about [a program house for Latino/a students], how they help a lot with tutors and stuff like that, so I feel like there’s enough resources out there to help me out.
Implications: First-year college students clearly perceive barriers to their academic and career decision making.

Participating in individual career counseling may help minimize the influence of perceived barriers when career counselors provide:
- information and support to refine how one thinks about a particular barrier, or
- guidance for students to take actions in the form of engaging performance accomplishments activities or developing coping strategies to overcome barriers.

At a minimum, career professionals should be aware of the variety of barriers that students may encounter (e.g., McWhirter et al., 1998; Swanson & Woitke, 1997).

Moving beyond acknowledging barriers, enhancing career decision-making self-efficacy may be an appropriate strategy for helping clients address perceived barriers (Swanson & Woitke, 1997) – as suggested in literature related to Social Cognitive Career Theory, and illustrated in some of the interview responses in this study.

In other cases, a more direct approach to addressing barriers perceptions may be warranted. For example, the parallels between the emergent themes in this study and interventions based on Cognitive Therapy (Beck, 1976; Beck & Weishaar, 1995; Meichenbaum, 1977) or the reframing of dysfunctional career thoughts (Sampson et al., 1996) are difficult to overlook. Career professionals who choose to employ these strategies are reminded to recognize the limits of their own professional training and experience and the limits of the scope of services provide by the career services offices. When necessary, appropriate referrals should be made.

What insights, thoughts, or questions do these study findings spark for you?
How might these study findings – or studies like these – inform your practice?
What related questions might you like to see addressed in future research?

Limitations: The scope of this study was delimited in many ways (e.g., single institution, single career intervention type, narrow student population, single career choice task).

Participation in the study was voluntary and self-selected. Attrition did occur over the course of the study. (Although, steps were taken to address this. See Makela, 2011.)

Exploration of barriers reduction in interview data analyses were limited by stringent inclusion criteria. However, due to calls for high-quality qualitative research in this area, the benefits were determined to outweigh the drawbacks.

More details on study limitations and analyses can be found in the original paper or may be discussed with the study author.

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