

Prior family business exposure as intergenerational influence and entrepreneurial intent: A Theory of Planned Behavior approach

Jon C. Carr^{*}, Jennifer M. Sequeira^{*}

University of Southern Mississippi, Department of Management & Marketing, P.O. Box 5270, Hattiesburg, MS 39406, United States

Received 1 July 2006; received in revised form 1 November 2006; accepted 1 December 2006

Abstract

Research indicates that family experiences constitute a powerful socializing influence on the values, attitudes, and behaviors people adopt over the course of their lives. Incorporating theoretical research using the Theory of Planned Behavior [Ajzen, I. Residual effects of past on later behavior: Habituation and reasoned action perspectives. *Personality and Social Psychology Review* 2002; 6(2): 107–122.] the mediating effects of attitudes towards business startup, perceived family support, and entrepreneurial self-efficacy (ESE) on entrepreneurial intent are tested using a sample of 308 individuals. Consistent with theory, results suggest significant direct and indirect effects of prior family business exposure on entrepreneurial intent, through the mediation variables of attitudes towards business ownership, perceived family support, and ESE.

© 2007 Elsevier Inc. All rights reserved.

Keywords: Business experience; Family support; Entrepreneurial self-efficacy; Behavioral intent

1. Introduction

Research in family business examines the means by which family-owned businesses handle succession (e.g. Stavrou and Swiercz, 1999), but little research considers the role that family business plays in encouraging future entrepreneurial inclinations. This is certainly understandable, since the nature of family ownership and succession lead to interesting (and at times troubling) challenges (Dyer and Handler, 1994).

However, family business ownership affects future generations in many ways aside from the issue of succession. The time requirements and resource shortfalls (as well as the financial rewards and autonomy) of family business ownership have powerful and lasting impacts on the social interactions and psychological development of the “family” in the family business (Aldrich and Cliff, 2003; Dyer and Handler, 1994). Individuals who come from families who own businesses are likely to be aware of these impacts (Fairlie and Robb, 2005). As a result, individuals with prior family business experience may incorpo-

rate their experiences, such that their attitudes and behaviors towards entrepreneurial action are shaped positively or negatively towards business ownership.

A recent research report from the Center for Economic Studies, Bureau of the Census, provides compelling evidence that intergenerational links affect small business outcomes, yet this report does not provide an adequate explanation on how these links are theoretically operationalized (Fairlie and Robb, 2005). This study provides a more grounded exploration of intergenerational linkages, using recent theoretical advances related to the Theory of Planned Behavior (TPB) (Ajzen, 2002). The study’s thesis is that exposure to prior family business serves as an intergenerational influence (IG) on entrepreneurial intent, and this influence is mediated through the individual’s attitude towards business start-up, their perceived family support, and entrepreneurial self-efficacy (ESE). As a result, this approach contributes both theoretically and empirically to Ajzen’s (2002) review, and may serve as a means to explain the research results of Fairlie and Robb (2005).

2. Theoretical background

A critical question in the development of a theoretical justification for prior family business experience is what constitutes

^{*} Corresponding authors. Carr is to be contacted at Tel./fax: +1 601 266 6545/4630.

E-mail addresses: jon.carr@usm.edu (J.C. Carr),
jennifer.sequeira@usm.edu (J.M. Sequeira).

the “family” element that defines a family business. This is not a trivial issue; theoretically, any work experience a person gains could influence subsequent entrepreneurial intent. Therefore, an examination of the influence of prior family business experience on intent should reflect what the family’s role is in shaping that intent.

Prior research seeking to define this “family” element focuses on many factors to determine what a family business is. Such factors include the level of majority ownership and family control within the firm (Gall and Sveen, 1991) and the likelihood of family succession (Churchill and Hatten, 1987). However, these factors do not encompass the degree to which norms, values, and even skills may move from generation to generation through business ownership.

While no universal definition of a family business exists, Chua et al., (1999) provide a definition that supports the role that “family” plays in business ownership. Chua et al. (1999: 25) define a family business as “...a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families”. This definition suggests that the family business plays a great role in the career choices of individual family members, and in particular the children of family members associated with the business. In fact, the attitudes and subjective norms related to this career choice may be reflective of this influence. Thus, the attitudinal and behavioral mechanisms within the family business can shape or influence subsequent entrepreneurial intent (Ajzen and Fishbein, 1980).

Theory of Reasoned Action examines the relationship between attitudes and behaviors. Put simply, the theory holds that attitudes towards a behavior are evaluated within the context of subjective norms. These norms, which are the individual’s perception of social pressure to engage or not engage in a particular behavior, are predictive of behavioral intent and ultimately whether the behavior is exhibited or not.

Extensions of the Theory of Reasoned Action have been developed subsequent to Ajzen and Fishbein’s (1980) arguments, most notably through the inclusion of perceived

behavioral control. This extension, known as the Theory of Planned Behavior (TPB) (Ajzen, 1988), holds that attitudes towards a behavior are evaluated within the context of subjective norms and perceived behavioral control. With respect to perceived behavioral control, individuals assess their ability regarding the difficulty/ease in performing a given behavior. This assessment is reflective of past experience and is based on perceptions about resource availability and anticipated obstacles (Gist and Mitchell, 1992). Thus, TPB holds that intention will be greatest when an individual holds a favorable attitude toward a behavior, experience strong subjective norms regarding that behavior, and anticipate that they can perform the behavior successfully. Recently, Ajzen (2002) has revised TPB, by theoretically proposing linkages between past behavior and future behavioral intent.

For the purposes of this research, this revised TPB approach serves two goals. At the theoretical level, the integration of symbolic interactionism (Mead, 1934) with TPB serves as an additional means to explain why past behavior might influence behavioral intent. Secondly, this theoretical rationale can be studied to evaluate the influence of prior family business experience on entrepreneurial intent. A more detailed examination of the components of TPB and past behavior as they relate to family business in an entrepreneurial context is provided below.

2.1. Theory of Planned Behavior factors in a family business context

Fig. 1 provides an example of an application of TPB related to prior family business exposure and entrepreneurial intent. Using this model, the focus on prior family business experience and the effect of this experience on entrepreneurial intent is viewed through the lens of attitudes toward business start-up, perceived family support (subjective norms) and ESE (perceived behavioral control).

Entrepreneurial intent is defined as those initial actions an individual takes prior to formally beginning the start-up or generating initial sales related to an on-going business. Several activities can be considered initial actions, including writing a

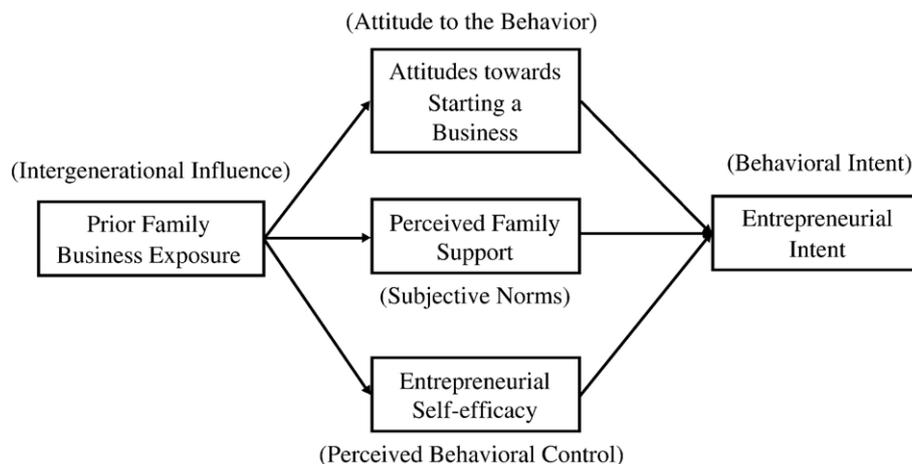


Fig. 1. A model of prior family business exposure and entrepreneurial intent.

business plan, looking for a building or equipment, saving money, or developing a product or service (Aldrich and Martinez, 2001; Carter et al., 1996). These activities can be characterized as intent since they occur in the pre-emergent (gestation) stage of the business (see Reynolds et al., 2004), and are not viewed as the ultimate entrepreneurial behavior (i.e. actual start-up). Further description of each component of the model is provided below.

2.2. Past family business exposure as intergenerational influence

The old adage of “past behavior is the best predictor of future behavior” has considerable popular belief, yet how past behavior influences behavioral intention through attitude formation and subjective norms is controversial (Ajzen, 2002). Some researchers consider this as a function of habituation, or as a function of conscious consideration or a reliance on routine action (see Ouellette and Wood, 1998). However, Ajzen (2002) contends that past behavior can have an effect on behavioral intention, and that this effect can follow a TPB approach.

Theoretical research suggests that prior family business experience serves as a mechanism to explain the effects of past behavior on intentions, and can be defined in the literature of symbolic interactionism as an intergenerational influence (IG) (Mead, 1934). IG is rooted in sociological and psychological theories that focus on the socialization of children. These theories stress that socialization occurs within families as a means to assist children in adopting the social roles and behaviors that are necessary to participate in society (Brim, 1968).

Prior family business exposure can be viewed as an intergenerational influence agent, since IG serves as one mechanism whereby “...the within-family transmission of information, beliefs, and resources...” occurs (Moore et al., 2002: 17). Throughout a person’s self-development, the socialization that occurs is a continuing process of reflection and action, which ultimately drives attitudes and behavior that people have concerning how they interact with others, what life choices they make, and how they decide what lifestyles and work roles to assume. A great deal of research supports this view of IG influence on subsequent behavior (e.g., Hoge et al., 1982). In particular, research demonstrates that parental work experiences have significant effects on children, and that these effects can be internalized as norms of behavior within these children into the future (Menaghan and Parcel, 1995). Research regarding family business supports this contention as well, namely that early exposure to entrepreneurship and experience in the family business (e.g. Dyer and Handler, 1994; Katz, 1992) will affect the family member’s attitude and intentions towards entrepreneurial action.

3. Research hypotheses

Research using the symbolic interactionist perspective suggests that individuals from families that own businesses are likely to use that exposure as a socialization source (Parcel and Menaghan, 1994; Menaghan and Parcel, 1995). In particular, research specifically related to entrepreneurial behavior

has shown that entrepreneurs often have a family history where their mother or father was self-employed (Dyer, 1992; Fairlie and Robb, 2005). In some cases, many entrepreneurs have indicated that they were often placed in positions of responsibility within their family’s business at a very young age (Dyer and Handler, 1994). Whether this was due to financial or other reasons, these entrepreneurs also indicate that their parents used their family business as a means to teach them the skills, values, and confidence required to own their own businesses. These experiences are likely to serve as a key element to building the informational requirements and behavioral skills necessary for self-employment, even if this exposure was not in the family’s existing business. These informational requirements and behavioral skills to start a business are first evident as the individual begins to take steps towards the entrepreneurial process, thus:

H1. Higher levels of exposure to a prior family business are significantly and positively related to entrepreneurial intent.

3.1. The mediating role of attitudes towards business start-up

“An attitude is a disposition to respond favorably or unfavorably to an object, person, institution, or event” (Ajzen, 1988: 4), and is the first determinant of behavioral intentions (Ajzen, 1991). In general, the more positive the attitude towards a behavior, the stronger should be the individual’s intention to perform that behavior (Armitage and Conner, 2001).

Attitudes can be influenced by many exogenous variables, including the strong ties that individuals have with important influence agents within their environment. For example, Dick and Rallis’ (1991) Theory of Career Choice emphasize that an individual’s beliefs about a career is influenced by their interpretation of past experiences, as well as their perception of the attitudes and expectations of ‘socializers’ (e.g. parents, friends, teachers) toward those careers. Those beliefs and experiences therefore influence attitudes toward a particular career and ultimately the career choice that those individuals make.

Early socialization in a family business contributes toward the formation of values and attitudes toward business ownership (Light and Bonacich, 1988). In general, individuals will hold a positive attitude towards business ownership if they perceive that other people important to them evaluate business ownership positively. In fact, a widely held view is that family background/childhood experiences, exposure to others in business, and previous job experiences influence the development of entrepreneurial-related attitudes (Morris and Lewis, 1995). As such, the attitudes towards business ownership will mediate the relationship between prior family business experience and entrepreneurial intentions, since the TPB would predict that they are necessary to positively lead to entrepreneurial intentions. Thus:

H2. Attitudes towards business ownership will mediate the relationship between prior exposure to a family business and entrepreneurial intent.

3.2. The mediating role of perceived family support

Current research using a symbolic interactionist perspective examines the critical role of reflected appraisal in the creation of the self-image. TPB also suggests that perceived family support provides the subjective norms that potential entrepreneurs may use to determine if their intent to start a business is accepted and supported by others deemed significant by them (Ajzen, 1991). As mentioned previously, children build self-identities through a socialization process that is both reflective and action-oriented. According to the reflective appraisal process, important or significant individuals or groups communicate appraisals of the individual's behavior, which in turn is used by the individual to understand who they are, and how they behave. Shrauger and Schoeneman's (1979) crucial examination of reflected appraisal extends this line of reasoning, and suggests that reflected appraisals are filtered through the individual's own self-perceptions.

Thus, for individuals with prior exposure to family business, their previous experiences are filtered through the individual's perception of themselves based upon the reflected appraisal of significant others in the context of self-employment. Additionally, Ajzen's (2002) revised approach suggests that these individuals are likely to have higher levels of entrepreneurial intent if they perceive that their family supports those actions. Entrepreneurial behavior that is positively and immediately supported is an important and necessary requirement for a new venture (Morrison, 2000). In fact, Dyer (1992) suggests that an individual whose family is not supportive can become discouraged and ultimately not proceed with starting a business. In general, the more support one receives from significant others, the greater the likelihood of an entrepreneurial intent. Thus,

H3. Perceived family support will mediate the relationship between prior exposure to a family business and entrepreneurial intent.

3.3. The mediating role of entrepreneurial self-efficacy

Self-efficacy represents an individual's belief that they can successfully accomplish a goal (Bandura, 1977). Various researchers have found that high self-efficacy underlies most human performance (Bandura et al., 1999; Bandura, 1993, 1999). Therefore, without a strong sense of self-efficacy, "...an individual has little incentive to act or to persevere in the face of difficulties" (Bandura, 2002: 2). Self-efficacy serves as an excellent measure of perceived behavioral control, since the degree to which a person can have confidence in their ability to start a business is directly related to their perceived control in executing that behavior (Ajzen, 1991). Perceived behavioral control refers to the perception of resource availability, but this concept also includes the individual's perceived ease/difficulty in completion of a task. Individuals will intend to participate in tasks that they believe can be accomplished (Bandura, 1997); therefore higher levels of self-confidence regarding the accomplishment of entrepreneurial tasks can be positioned as increased volitional control. This is consistent with Ajzen's

assessment of the potential role of self-efficacy in TPB, namely that, "...to the extent that perceived behavioral control is veridical, it can serve as a proxy for actual control and contribute to the prediction of the behavior in question." (2002: 107). As vicarious experience related to self-employment increases, ESE beliefs are also likely to increase as well. Thus:

H4. Entrepreneurial self-efficacy will mediate the relationship between prior exposure to a family business and entrepreneurial intent.

In summary, this study hypothesizes that prior family business exposure has a direct and indirect effect on entrepreneurial intentions. Overall, these relationships are supported theoretically by Ajzen (2002) and have clear links to empirical research in this domain. Interestingly, research by Fairlie and Robb (2005) find a direct effect of prior family experience and self-employment, but they do not have data available to successfully explore the theoretical arguments suggested within this study. Therefore, this study seeks to confirm the TPB relationships outlined by Ajzen as they relate to prior behavioral experience, and enhance the initial findings found by Fairlie and Robb (2005) and others.

4. Methods

4.1. Sample

The sample consisted of individuals from a large southwest U.S. city. The sample included members of various ethnic, technology, and small business networking organizations as well as attendees of business start-up seminars within the community. The respondents had the choice of completing the questionnaire on-line, on-site, or returning the survey via mail. Using all of these methods, over 679 respondents were contacted for participation. Overall, these methods produced 389 overall responses with a usable sample of 308 respondents and a response rate of approximately 45%.

Given the difficulty in capturing a sample of nascent entrepreneurs, this study used a questionnaire to capture the study measures at one point in time. As a result, the possibility for common method variance may affect empirical results and research conclusions. Harmon's one-factor test (Podsakoff and Organ, 1986) was used to determine whether common method bias was a significant concern. For the combined factor analysis, the results indicate nine factors with eigenvalues greater than 1. Additionally, the variables loaded on their respective constructs consistently. While the Harmon one-factor test is a weak test of common methods bias, the results suggest that common method bias was not a primary concern.

The 308 individuals in the sample consisted of 143 (46.4%) males and 165 (53.6%) females, with an average age of 34 and 11.7 years of work experience. Within the sample, 193 (62.7%) respondents worked full-time, 64 (20.8%) worked part time, 26 (8.4%) were unemployed, 18 (5.8%) were full-time students, and 7 (2.3%) were a combination. Finally, 52% of the respondents worked for small organizations (i.e. less than 500 employees), with a majority being non-management employees (58.5%).

4.2. Study measures

4.2.1. Prior family business exposure

To capture prior family business exposure, an index was created based upon responses to three questions. Respondents were asked the following questions: “Does a parent currently own or have they ever owned a business?”; “Does a family member other than a parent currently own or have they ever owned a business?”; and “Have you ever worked in a family member’s business”. Based upon a “Yes” or “No” response, prior family business exposure was assessed by summing the “Yes” responses.

4.2.2. Attitudes towards business ownership

The attitude measure was developed using a semantic differential set of questions, a technique used frequently by Ajzen (1971, 1988), and Ajzen and Fishbein (1980). This measure consists of a 5 item set of bipolar evaluative adjective pairs containing a negative evaluation on one end and a positive evaluation on the other, such as: “in general, business ownership is: harmful – helpful; negative – positive; worthless – worthwhile”. Each adjective pair was placed on opposite ends of a 5-point scale, and a measure of attitudes towards business ownership was obtained by averaging the individual scores of each item. The Cronbach’s alpha for this measure was .87.

4.2.3. Perceived family support

Perceived family support serves as the individual’s reflected appraisal and as a subjective norm used by individuals to assess the support they perceive their immediate family has for them concerning starting a business. An 8 item measure was developed to capture this reflected appraisal. The respondents were asked to circle the number that most accurately reflects their response to questions such as “My parents (siblings, close relatives, etc.) feel ____ about my starting a business”. The respondent then had the option to choose from a 5-point Likert scale where 1 = “extremely negative” and 5 = “extremely positive”. Cronbach’s alpha for this summative measure was .87.

4.2.4. Entrepreneurial self-efficacy

To examine the relationships between ESE and entrepreneurial intent, respondents answered 26 questions designed to

capture their level of entrepreneurial self-efficacy. This measure was developed using a multi-step procedure similar to the procedure used by Chen et al. (1998). A list of 75 relevant tasks was developed, with entrepreneurship scholars and a practicing entrepreneur ranking these 75 tasks as to their level of importance to business start-up. A pilot test prior to this study was conducted, with factor analysis results used to create a final list of 26 tasks. A principle-axis factor analysis with direct-oblimin rotation was used to assess the factor structure of the 26 items. The factor analysis revealed some cross-loading variables, which were dropped from further consideration, leaving a total of 17 items. Cronbach’s alpha for the 17-item measure was .96. To capture overall ESE, an average score was calculated and used in the analysis.

4.2.5. Entrepreneurial intentions

To capture the degree to which the respondent was putting in place the steps needed to actually start their business, a summated index was created based upon the respondent’s answer to six questions. Example questions include, “Have you filed for a tax identification number in order to start a full-time business?”; “Are you in the process of writing a business plan?” and “Have you begun to save money to invest in the business?” Summated values ranged from zero to six, with over 30% of the respondents indicating “Yes” to at least two of these questions.

Appendix A lists the initial items used to create the measures used in this study. Mean values, standard deviations, and Pearson’s zero-order correlations for study variables are summarized in Table 1.

To test the hypothesized relationships, mediation tests following the four step approach as outlined by Baron and Kenny (1986) were first conducted using hierarchical multiple regression. In addition, the Sobel test statistic for mediation for each model was calculated to provide additional evidence regarding mediation within each model (Sobel, 1982).

The regression analyses were conducted as follows. First, the control variables of gender, educational attainment, and work experience were regressed on entrepreneurial intent (Model 1). Secondly, the main effect of prior family business exposure was added to the regression (Model 2), followed by each respective

Table 1
Means, standard deviations, and correlations for study variables^a

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Gender ^b										
2. Educational attainment ^b			-.12*							
3. Work experience	11.74	9.39	.00	.05						
4. Prior family business exposure	1.15	1.06	.05	.10	-.13*					
5. Attitudes towards starting a business	4.27	.70	-.09	.09	.04	.21**				
6. Perceived family support	3.24	1.04	.03	.04	-.04	.17**	.37**			
7. Entrepreneurial self-efficacy	11.19	2.18	-.12*	.08	-.06	.12*	.49**	.33**		
8. Entrepreneurial intent	1.28	1.71	.02	.07	.31**	.14*	.36**	.23**	.21**	

$p < .10$; * $p < .05$; ** $p < .01$.

^a $n = 308$.

^b Males comprised 46.4% of the sample; 71.1% had less than a graduate degree.

mediator (Models 3–5). Additionally, a final model regressing prior family business exposure and all of the mediating effects variables on entrepreneurial intent was conducted (Model 6).

5. Results

Results obtained from the regression analyses are presented in Table 2. Based upon the results, support was found for all four hypotheses. For Hypothesis 1, a higher level of prior family business exposure is predicted to be positively associated with entrepreneurial intent. Results for Model 2 in Table 2 indicate support for this hypothesis ($B = .05, p < .01$).

To test mediation effects, a set of regressions was conducted using prior family business exposure as a predictor of the mediating variables. Subsequent to this, regressions were conducted on both the main effect and mediating effects on entrepreneurial intentions. For each model, prior family business exposure significantly predicted the mediating variables, thus providing support to continue further mediation tests for each model. Subsequent to this initial examination, the coefficient of the main effect (prior family business exposure) for all three models was examined, after loading the mediating effect of attitudes towards starting a business (Model 3), perceived family support (Model 4) and the mediating effect of ESE (Model 5).

For Model 3, the main effect was significant, though smaller with the inclusion of attitudes towards starting a business. The Sobel test was strongly significant (Sobel test statistic = 3.11, $p < .01$), suggesting that attitudes towards starting a business partially mediate the main effects of prior family business exposure on entrepreneurial intent. For Model 4, the results are similar. Perceived family support partially mediates the relationships between prior exposure to a family business and entrepreneurial intent (Sobel test statistic = 2.30, $p < .05$), thus

providing support for Hypothesis 3. Finally, support for Hypothesis 4 was found, with ESE partially mediating the effect of prior exposure to a family business on entrepreneurial intent (Sobel test statistic = 1.70, $p < .10$).

When all of the mediating variables are loaded in Model 6, prior exposure to a family business is still significant, though weak ($p < .10$). This suggests that prior experiences are still important in predicting entrepreneurial intent. For each mediating variable, the results support the contention that attitudes towards intentions, subjective norm support, and task-level self-efficacy are positively related to entrepreneurial intent. A discussion of these results is provided below.

6. Discussion

As stated previously, the purpose of this study is to explore the means by which prior exposure to family business ownership shapes entrepreneurial intent through a revised Theory of Planned Behavior approach as outlined by Ajzen (2002). Using a symbolic interactionist lens, results indicate that exposure to a prior family business serves as an important intergenerational influence on entrepreneurial intent.

In addition, support was also found for the mediating effects of attitudes towards business ownership, perceived family support, and ESE on whether individuals intend to start their own business. For each of the models, the mediation variables did not fully mediate the relationship between prior family business exposure and entrepreneurial intent. This is supported by Ajzen's (2002) contention that the residual effects of prior experience can be powerful, particularly in situations where individuals have little certainty in terms of their attitudes, subjective norms, or their perceived behavioral control.

These findings have several implications that can inform both theory and practice. First, this study includes individuals that are in the gestation stage of the business, with many actively participating in at least two nascent entrepreneurial activities. With a few exceptions, many studies on entrepreneurial intentions have focused on students who are considering starting a business upon graduation or those currently enrolled in entrepreneurship classes. An advantage of this particular sample is that the sample provides information on the entrepreneurial processes underlying business start-up using respondents who are actually at various stages within this gestation process. As a result, increased linkages can be ascertained between prior family business experience and entrepreneurial intent.

Second, past family business research on the roles of parents and children within the business has focused primarily on business succession, and the challenges that can occur when these children decide to accept or reject the opportunity to join the family business (Stavrou and Swiercz, 1999). Based upon this research, some initial evidence related to these challenges can be determined. Research on reflected appraisals, in conjunction with the transmission of parental values and beliefs, appear to powerfully shape the socialization and development of self. Thus, despite the exposure to the family business, children of family

Table 2
Mediated regression of study variables on entrepreneurial intent ($n = 308$)^a

Variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Gender	.00	-.04	.07	-.05	.04	.06
Educational attainment	.05	.03	.02	.02	.02	.02
Work experience	.05**	.06**	.06**	.06**	.06**	.06**
Prior family business exposure		.30**	.19*	.24*	.26**	.17 [†]
Attitudes towards starting a business			.52**			.41**
Perceived family support				.36**		.19**
Entrepreneurial self-efficacy					.34**	.19*
Sobel test statistic for mediation ^b			3.11**	2.30*	1.70 [†]	
R^2	.08**	.11**	.20**	.16**	.15**	.22*
Adjusted R^2	.07**	.10**	.19**	.14**	.13**	.20**
ΔR^2		.03**	.09**	.05**	.04**	.11**

[†] $p < .10$; * $p < .05$; ** $p < .01$.

^a Main and mediating effects standardized prior to model entry.

^b Model 6 Sobel test not calculated for multiple mediation variables.

business owners may receive reflected appraisals and create subjective norm beliefs from significant others that may be incongruent to those experiences (a discouragement to be self-employed, for example). These initial results serve as an avenue to further explore prior family business exposure, and how the congruence or incongruence of subjective norms and efficacy beliefs shape entrepreneurial intentions as well.

Third, these results empirically contribute overall to Ajzen's (2002) arguments on the residual effects of past behavior on behavioral intent. Prior behavioral experience can affect behavioral intent; and yet prior experience may be mitigated by the intervening factors outlined within TPB. Interestingly, this viewpoint has a great deal of face validity. For example, children may be socialized such that they have internalized both the skills and confidence for business start-up, and yet they may be discouraged due to the lack of perceived support from their family or significant social relationships.

From a practical standpoint, Fairlie and Robb (2005) conclude their study by calling for the development of mentor–protégé and apprenticeship programs that stress actual work experience in small business settings as a means to develop the general and specific human capital skills necessary to become a future entrepreneur. These results suggest that prior family business exposure may, in fact, provide an environment for this training. Family businesses create jobs, impact economic development, and provide revenues to support local governments. However, from a human capital perspective family businesses may add yet one more additional benefit—they could be described as “business incubators” for future business start-ups by serving as a training ground for those children of family firm owners.

7. Limitations and future directions

Admittedly, this study is not without limitations. As mentioned previously, this study may suffer from common method bias, since the measures used were captured in a cross-sectional research design. The cross-sectional data used in this study prevents the models from demonstrating causation. Additionally, the threat of self-report bias may also exist in this study. In particular, the self-efficacy construct may suffer from bias since respondents may overstate their perceived ability to accomplish entrepreneurial tasks. However, self-reports are, in general, quite accurate when information gathered is not of a sensitive nature (Ajzen, 1988), and sensitive information was not gathered in this study. All questions pertained to the activities surrounding an individual starting a business and how the individual perceives that their family supports that effort. The generalizability of the model may also be viewed as a possible limitation; thus, additional research is needed to confirm the generalizability of these findings to other samples and settings.

Several future research directions are possible based upon results from this study. An interesting aspect to explore further is the quality of the prior family business experience a nascent entrepreneur receives, and the degree to which this quality positively or negatively affects their attitudes, subjective norm beliefs, and behavioral control regarding business startup.

Additionally, what conclusions can be drawn from counter-vailing attitudes towards business ownership and behavioral intent? Some interesting arguments regarding these questions have already been proposed.

Ajzen's (2002) suggests that when individuals have ambivalent or uncertain attitudes and normative influences, the effect of prior experiences will more strongly affect intentions. In particular, when individuals have no clear plan of action, they are more likely to rely on their experiences to gauge their intentions as well. Entrepreneurial intentions and behaviors are often clouded in such circumstances. Thus, start-up intentions and behaviors are embedded in an environment that demonstrates the power of prior experience (in this case prior family business experience) on these intentions. Given the inherent uncertainty associated with business start-up, this represents an excellent area of further research.

Future research should examine perceived versus actual subjective norms regarding business start-up. By gathering additional data from the potential entrepreneurs' significant others, researchers can gain insight as to whether others' opinions towards business ownership are consistent with the potential entrepreneurs' perceptions. Additionally, those attitudes that underlie entrepreneurial self-efficacy and the individual's evaluation of those attitudes may be valuable in further understanding the role of ESE and entrepreneurial intent.

Longitudinal studies are also necessary to determine whether the intentions of those with prior family business experience actually evolve into action. Individuals may hold strong positive attitudes toward business start-up, perceive that important others are supportive of their starting a business and have high entrepreneurial self-efficacy, yet their entrepreneurial intentions never become reality. Knowledge of the factors that preclude these individuals from beginning their entrepreneurial ventures would bring additional insight to the entrepreneurial process.

Acknowledgement

This research was partially funded by the Ewing Marion Kauffman Foundation: Kansas City, MO, USA.

Appendix A

Study variables and their respective items are presented below for those variables not previously discussed in the text. Additionally, all 26 items developed initially for entrepreneurial self-efficacy are presented below for the purpose of allowing comparisons to other ESE scales.

I. Attitudes towards starting a business

5-point bi-polar adjective pairs

In general, starting a business is:

1. Harmful – Helpful
2. Negative – Positive
3. Worthless – Worthwhile
4. Bad for me – Good for me

5. Disappointing– Rewarding

II. Perceived family business support

5-point Likert scale

(1 = extremely negative to 5 = extremely positive)

1. My parent(s) feel _____ about my starting a business.
2. My spouse/significant other feels _____ about my starting a business.
3. My brother/sister feels _____ about my starting a business.
4. In general my relatives feel _____ about my starting a business.
5. My neighbor feels _____ about my starting a business.
6. My co-worker(s) feels _____ about my starting a business.
7. In general my acquaintances feel _____ about my starting a business.
8. My close friends feel _____ about my starting a business.

III. Entrepreneurial self-efficacy

5-point rating scale (1 = very little confidence to 5 = complete confidence)

Items are preceded by the statement “How much confidence do you have in your ability to...”

1. Work long hours in my business
2. Train employees
3. Save or personally accumulate the necessary capital to fund my business
4. Recognize a business opportunity before others do
5. Read and interpret financial statements
6. Delegate tasks and responsibilities to employees in my business
7. Organize and maintain the financial records of my business
8. Inspire, encourage, and motivate my employees
9. Deal effectively with day-to-day problems and crises
10. Recruit and hire employees
11. Prepare projected (pro-forma) financial statements (e.g. balance sheets) without assistance
12. Design an effective marketing/advertising campaign for a new product or service
13. Identify the need for a new product or service
14. Get others to identify with and believe in my vision & plans for a new business
15. Manage the financial assets of my business
16. Gain the confidence and trust of people who do not know me very well
17. Design a product or service that will satisfy customer needs and wants
18. Supervise employees
19. Find individuals with the necessary capital to fund my business
20. Estimate customer demand for a new product or service
21. Design appropriate incentives & rewards for my employees
22. Clearly and concisely explain verbally/in writing my business idea in everyday terms
23. Brainstorm (come up with) a new idea for a product or service
24. Estimate the amount of start-up funds and working capital necessary to start my business

25. Network — i.e. make contact with and exchange information with others

26. Determine a competitive price for a new product or service

IV. Entrepreneurial intentions

6 questions designed to capture behavioral intentions towards starting a business (yes, no).

1. Have you filed for a tax identification number in order to start a full-time business?
2. Are you in the process of developing a product or service?
3. Are you in the process of putting together a start-up team?
4. Are you looking for a building or equipment for the business?
5. Are you in the process of writing a business plan?
6. Have you begun saving money to invest in the business?

References

- Ajzen I. Attitudinal vs. normative messages: an investigation of the differential effects of persuasive communications on behavior. *Sociometry* 1971;34:263–80.
- Ajzen I. *Attitudes, Personality and Behavior*. Chicago, Illinois: Dorsey Press; 1988.
- Ajzen I. The Theory of Planned Behavior. *Org Behav Human Decis Process* 1991;50:179–211.
- Ajzen I. Residual effects of past on later behavior: habituation and reasoned action perspectives. *Personal Soc Psychol Rev* 2002;6(2):107–22.
- Ajzen I, Fishbein M. *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, N.J.: Prentice-Hall; 1980.
- Aldrich HE, Cliff JE. The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective. *J Bus Venturing* 2003;18:573–96.
- Aldrich HE, Martinez MA. Many are called, but few are chosen: an evolutionary perspective for the study of entrepreneurship. *Entrep Theory Pract* 2001:41–56.
- Armitage CJ, Conner M. Efficacy of the Theory of Planned Behaviour: a meta-analytic review. *Br J Soc Psychol* 2001;40:471–99.
- Bandura A. Self-efficacy: toward a unifying Theory of Behavioral Change. *Psychol Rev* 1977;84:191–215.
- Bandura A. Perceived self-efficacy in cognitive development and functioning. *Educ Psychol* 1993;28:117–48.
- Bandura A. *Self-efficacy: The Exercise of Control*. New York: Freeman; 1997.
- Bandura A. A Social Cognitive Theory of Personality. In: Pervin L, John O, editors. *Handbook of Personality*, vol. 2. New York: Guilford Publications; 1999. p. 154–96.
- Bandura A. Social cognitive theory in cultural context. *J Appl Psychol Int Rev* 2002;51:269–90.
- Bandura A, Pastorelli C, Barbaranelli, Caprara GV. Self-efficacy pathways to childhood depression. *J Pers Soc Psychol* 1999;76:258–69.
- Baron RM, Kenny DA. The mediator–moderator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *J Pers Soc Psychol* 1986;51:1173–82.
- Brim OG. Adult socialization. In: Clausen J, editor. *Socialization and society*. Boston: Little Brown; 1968. p. 183–226.
- Carter NM, Gartner WB, Reynolds PD. Exploring start-up event sequences. *J Bus Venturing* 1996;11:151–66.
- Chen CC, Greene PG, Crick A. Does entrepreneurial self-efficacy distinguish entrepreneurs from managers. *J Bus Venturing* 1998;13:295–317.
- Chua JH, Chrisman JJ, Sharma P. Defining the family business by behavior. *Entrep Theory Pract* 1999;29(4):19–39.
- Churchill NC, Hatten KJ. Non-market based transfers of wealth and power: a research framework for family businesses. *Am J Small Bus* 1987;11(3):51–64.
- Dick TP, Rallis SF. Factors and influences on high school students' career choices. *J Res Math Educ* 1991;22Issue nr 4:281–92.
- Dyer WG. *The Entrepreneurial Experience*. San Francisco: Jossey–Bass; 1992.
- Dyer WG, Handler W. Entrepreneurship and family business: exploring the connections. *Entrep Theory Pract* 1994:71–83.

- Fairlie RW, Robb AM. Families, Human Capital, and Small Business: Evidence from the Characteristics of Business Owners Survey. Washington, DC: Center for Economic Studies, Bureau of the Census; 2005.
- Gall MA, Sveen J. Internationalizing the family business: facilitating and restraining factors. *Fam Bus Rev* 1991;4(2):181–90.
- Gist ME, Mitchell TR. Self-efficacy: a theoretical analysis of its determinants and malleability. *Acad Manag Rev* 1992;17:183–211.
- Hoge D, Petrillo GH, Smith EJ. Transmission of religious and social values from parents to teenage children. *J Marriage Fam* 1982;44:569–80.
- Katz JA. A psychosocial cognitive model of employment status choice. *Entrep Theory Pract* 1992:29–37.
- Light I, Bonacich E. Immigrant Entrepreneurs: Koreans in Los Angeles, 1965–1982. Los Angeles: University of California Press; 1988.
- Mead GH. *Mind, Self, and Society*. Chicago: University of Chicago Press; 1934.
- Menaghan EG, Parcel TL. Social sources of change in children's home environment: the effects of parental occupational experience and family conditions. *J Marriage Fam* 1995;57:69–84.
- Moore ES, Wilkie WL, Lutz RJ. Passing the torch: intergenerational influences as a source of brand equity. *J Mark* 2002;86:17–37.
- Morris MH, Lewis PS. The determinants of entrepreneurial activity: the implication of marketing. *Eur J Mark* 1995;29:31–48.
- Morrison A. Entrepreneurship: what triggers it? *Int J Entrep Behav Res* 2000;5(2):59–71.
- Ouellette JA, Wood W. Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychol Bull* 1998;124:54–74.
- Parcel TL, Menaghan EG. Early parental work, family social capital, and early childhood outcomes. *Am J Soc* 1994;99:972–1009.
- Podsakoff PM, Organ DW. Self-reports in organizational research: problems and prospects. *J Manag* 1986;12:531–44.
- Reynolds P, Carter N, Gartner W, Greene P. The prevalence of nascent entrepreneurs in the United States: evidence from the panel study of entrepreneurial dynamics. *Small Bus Econ* 2004;23(4):263–84.
- Shrauger JS, Schoeneman TJ. Symbolic interactionist view of self-concept: through the looking glass darkly. *Psychol Bull* 1979;86:549–73.
- Sobel ME. Asymptotic confidence intervals for indirect effects in structural equation models. In: Leinhardt S, editor. *Sociological methodology*. Washington, DC: American Sociological Association; 1982. p. 290–312.
- Stavrou ET, Swiercz PM. Securing the future of the family enterprise: a model of offspring intentions to join the business. *Entrep Theory Pract* 1999:19–39 Winter.