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# Slowed by commitment and hastened by obstacles: Exploring patterns of entrepreneur role exit in the EPOP dataset

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ARTICLE INFO	A B S T R A C T
Keywords: Entrepreneur role Role exit Identity theory Commitment Obstacles Logistic regression	Empirical understanding of why individuals become former entrepreneurs is not well- established. This investigation draws upon Identity Theory and Role Exit Theory to explore pat- terns in Entrepreneurship in the Population (EPOP) Survey Project dataset. The key finding is a theory-consistent tension between commitment and obstacles encountered in predicting exit from the entrepreneur role. The likelihood of being a former entrepreneur is decreased by surro- gate indicators of commitment such as having a business as primary personal income source. The likelihood is increased by proximal obstacles such as low levels of familial support. These pat- terns persist after statistical control for a wide swath of demographic and business characteristics. Based on these observed patterns, avenues for future research and implications for entrepreneurs, educators, and policymakers are considered.

Some aspire to the entrepreneur role, and some are obligated (Burton et al., 2016; Lundqvist et al., 2015). Variability of entry paths into entrepreneurship suggests similar richness in exit (DeTienne 2010; Wennberg et al., 2010). Much work seeks to understand the steps leading to, the process of becoming, and/or effective training methods for creating an entrepreneur (e.g., Newbery et al., 2018; Leitch and Harrison 2016; Cohen and Musson 2000). Less considered are factors and processes leading to transitions out of the entrepreneur role (Cardon and Arwine 2024; Feng et al., 2022). The present investigation adds to a small but growing body of literature speaking to a simple yet very important area of academic and practical concern: why entrepreneurs quit (Jenkins and Byrne 2021; Radu-Lefebvre et al., 2021; Justo et al., 2015).

We adopt the position that "entrepreneur" is a social role with corresponding role-identity (Smith et al., 2023; Hoang and Gimeno 2010). Understanding entrepreneurship in terms of an associated social role affords theory-based understanding of the process of exit from the entrepreneur role. This process will be shaped by commitment to enacting an entrepreneur role-identity (Burke 2023; Burke and Stets 2022) as well as obstacles that may precipitate the early stages of role exit (Ebaugh 1988). Bearing this in mind, we briefly review aspects of Identity Theory and Role Exit Theory most relevant to entrepreneur role exit (Burke and Stets 2022; Ebaugh 1988). We analyze differences between current and former entrepreneurs in a nationally representative dataset of entrepreneurs in the U. S. (Entrepreneurship in the Population (EPOP) Survey Project Public Use Data File: 2022) and interpret findings with respect to Identity Theory and Role Exit Theory (Burke and Stets 2022; Ebaugh 1988).

The key findings of this investigation are differences between current and former entrepreneurs that are theory-consistent and indicative of a tension between commitment to the entrepreneur role-identity and proximal obstacles encountered by individuals enacting the role. Surrogates for commitment such as requesting additional financing and having the business as primary income source increase the likelihood of being a current entrepreneur within the EPOP dataset. Obstacles encountered such as capital requested but denied and lack of support from family, friends, and colleagues decrease the likelihood of being a current entrepreneur. These pat-

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terns are notable given their observation within a generalized survey of entrepreneurs. Based on these findings, we suggest avenues for future research that may leverage theoretical insights more directly and have notable implications for entrepreneurs, academics, and policymakers.

#### 1. Entrepreneur role and role exit

Existing research that may be linked with entrepreneur role exit suggests a number of relevant factors. Persistence and access to resources should increase the likelihood of continued entrepreneurship (Boss et al., 2023) while burnout, stigmatized failure, and loneliness may reduce it (Cardon and Arwine 2024; Shepherd et al., 2019). Situational factors such as local definitions of "entrepreneur" (Audretsch et al., 2017) as well as institutional rules and resources (Boettke et al., 2009) may also predict entrepreneurial cessation. While there are extant findings relevant to anticipating entrepreneur role exit, there are also notable limitations (DeTienne 2010). Limitations include typical emphasis on exits from business ventures rather than entrepreneurship (Feng et al., 2022; Hsu et al., 2016; cf. Wennberg et al., 2010), specific focus on economic conditions (Pollack et al., 2012), and samples of aspiring rather than practicing entrepreneurs (Kar and Ahmed 2021; Parker and Belghitar 2006). More generally, there has been little application of theory in addressing the issue of why individuals exit the entrepreneur role.

An individual enacting the "entrepreneur" role also has a corresponding role-identity that comprises part of their sense of self (Burke and Stets 2022), a perspective known to entrepreneurship research (e.g., Smith et al., 2023; Gruber and MacMillan 2017). Identity Theory provides a base from which to understand entrepreneur role exit, particularly with respect to what makes an individual more likely to stay in the role. Verifying feedback and manifestations of commitment are central to Identity Theory. Feedback may be direct or indirect as well as observed or inferred. Role-identities receiving verifying feedback tend to be associated with greater enactment intentions (commitment). Among other manifestations, the parts of self to which an individual is more committed also tend to have more associated resources (e.g., time allocated, money spent, social connections, etc.) (Burke 2023).

Behaviors linked with the entrepreneur such as hours worked on a startup, personal capital invested, or reliance on entrepreneurial activities as a primary source of income may be interpreted as indicative of commitment to the entrepreneur role-identity and predictive of future status. Essentially, as indicators of commitment increase in number, it seems likely that the likelihood of continued enactment of the entrepreneur role-identity will also increase. However, while commitment to an "entrepreneur" role-identity is likely to provide some resilience to non-verification, the buffer seems unlikely to be unlimited. An additional theoretical perspective beyond Identity Theory is needed to recognize such an occurrence.

Role Exit Theory indicates that exit from the entrepreneur role will follow a stage-based process, possibly manifesting in a nonlinear manner (Parnaby and Weston 2020; Wittman 2014; Ebaugh 1988). The process has four stages: first doubts, seeking alternatives, turning point, and exit. First doubts lead to seeking alternatives. Evaluation of alternatives is typically ended by the arrival of a turning point. After the turning point, role exit becomes much more likely to happen. Importantly, progress towards a role exit may be averted or delayed by intention as well as circumstance, and the process may not necessarily be easily observable conditioned upon outcome. The four-stage process begins as a cognitive one (doubts based on experiences and events) and may manifest through behavioral change including exit (Ebaugh 1988).

First doubts are common occurrences and are also an indicator that role exit is more likely to be considered. Apprehension may be induced by factors including substantial differences between role expectations and experience, changes in associated organization/relationships, and major events. While individuals early in the doubting process are frequently not vocal about their status, progression towards role exit is also influenced by feedback from other individuals. Confirmation of the doubts by others tends to speed progress towards role exit. As doubts are confirmed based on observed or inferred feedback from others, alternatives to the individual's current role situation are sought in earnest (Ebaugh 1988).

For entrepreneurs, there may be relatively stable and consistent markers to anticipate the start of a role exit process. Entrepreneurs regularly encounter obstacles that may shape intentions to withdraw from entrepreneurship (Kollman et al., 2017; Justo et al., 2015). An individual who is an entrepreneur may become dissatisfied with day-to-day requirements or financial stability, experience upheaval in other businesses or individuals providing support/supply, and any number of events such as the appearance of a competitor or loss of a contract that may change immediate behavior (Chen et al., 2017; Hassan and Al-Jubari, 2015; Brundin and Gustafsson 2013). Such obstacles seem likely to raise doubts about the entrepreneur role, test commitment to the role, and serve as a predictor of status as a current versus former entrepreneur. Essentially, the entrepreneur role is one typified by overcoming obstacles such as operational setbacks, lack of financial support, and increasing costs. As the quantity of these obstacles increases, it also seems reasonable to expect that the probability of role exit will increase.

#### 1.1. Role exit and the EPOP dataset

The EPOP Survey Project began in 2022 with a goal of understanding the extent and character of entrepreneurship in the United States (Brummet and Johnson 2022). The 2022 data collection occurred between February and June 2022 with 32,021 completed surveys anonymized for researchers utilizing the dataset. All respondents answered screening questions used for classification into one of seven categories capturing entrepreneurial activity: current business owner (n = 4,907), current freelancer (n = 4,213), nascent entrepreneur (n = 1,467), former business owner (n = 3,030), former freelancer (n = 3,144), withdrawn entrepreneur (2,649), or non-entrepreneur (n = 12,611). Following the classification portion, respondents answered background/activity questions partially specific to their classification. Finally, respondents provided some basic demographic information (Entrepreneurship in the Population (EPOP) Survey Project Public Use Data File: 2022). There were no standardized psychological assessments of personality, attitude, or motives.

In the present inquiry, we explore how patterns within the existing EPOP dataset fit with basic tenets of Identity Theory and Role Exit Theory (Burke and Stets 2022; Ebaugh 1988). Classifications of current versus former entrepreneurs may not provide full coverage of a role exit process but do provide a contrasting outcome for illuminating predictors of the first doubts stage of role exit. Factors such as having a business as a primary income source or working additional hours should be linked with increasing commitment to the entrepreneur role. Obstacles encountered such as those related to financing or personal circumstances should be indicative of additional doubts and a higher propensity to exit, all else equal.

#### 1.2. Study sample and key variables

Of the 7,937 current and former business owners in the EPOP dataset, we excluded certain business types and legal statuses. We removed multi-level marketing initiative (n = 213) and other/missing (n = 168) business types, along with non-profit (n = 218) and other/missing (n = 350) legal statuses. In addition, we excluded businesses starting before 2000 (n = 2,308) to reduce recall issues. We also excluded business starting after the year 2019 (n = 1,081) to limit the effect of COVID start-ups on the results. Finally, we excluded businesses where the start date was unknown (n = 235). In total, the study sample included 3,833 current (n = 2,696) and former (n = 1,137) entrepreneurs. The dependent variable, CURRENT, is whether or not the respondent is a current or former entrepreneur. The independent variables can be roughly classified into capital/financing (e.g., start-up capital, additional financing, etc.), entrepreneur/business characteristics (collaboration, hours per week, primary income, etc.), and challenges faced (e.g., financial challenges, support challenges, etc.). The control variables can be roughly classified into demographics (e.g., opst business plans, year started, industry, etc.). Summary statistics for the independent and control variables are shown in Tables 1 and 2. A full list of the independent and control variables are provided in Appendix Tables A1 and A2. Due to the amount of missing data within the many variables, a preliminary analysis was run with all independent and control variables. The goal was to reduce the number of excluded observations. Brief details are provided in the Appendix.

#### 1.3. Base model

When running the base model, 626 observations are removed due to missing data in one or more variables, resulting in a final sample size of 3,207 (). Results are shown in Table 3, Model 1. Each additional source of start-up capital increases the odds of being CURRENT by 59% for personal sources and by 52% for business sources. Interestingly, for each additional source of start-up capital requested but denied, the odds of being CURRENT increase by 15%. Coming up with the business idea on their own increases the odds of being CURRENT by 57% compared to coming up with the idea with other(s). Compared to leasing space for the business, the odds of being CURRENT increase by 82% for a purchased location, 101% for a residence, and 61% for other locations. Requesting addi-

#### Table 1

Independent variable summary statistics.

	Former	Current	
	(N = 1137)	(N = 2696)	_
Variable	Value	Value	
CAP.PERS	0.99 (0.78)	1.41 (0.92)	
CAP.BIZ	0.25 (0.54)	0.80 (1.10)	
CAP.DENY	0.52 (1.27)	2.17 (2.46)	
COLLAB			
Other(s)	40.2%	26.9%	
Self	59.8%	73.1%	
BIZ.LOC			
Lease	28.5%	23.2%	
Purch	5.4%	13.3%	
Residence	52.4%	53.2%	
Other	13.7%	10.3%	
ADD.FIN			
No	87.9%	53.5%	
Yes	12.1%	46.5%	
HOURS	34.65 (22.63)	28.91 (20.80)	
PRIM.INC			
No	62.3%	34.7%	
Yes	37.7%	65.3%	
CHLNG.FIN	1.59 (1.57)	1.67 (1.46)	
CHLNG.BIZOP	0.58 (0.84)	0.92 (0.92)	
CHLNG.CUST	0.90 (0.88)	1.15 (0.90)	
CHLNG.SUPPBIZ	0.34 (0.65)	0.73 (0.87)	
CHLNG.SUPPPERS	1.24 (1.22)	1.13 (1.15)	
CHLNG.ECMKT	1.14 (1.12)	1.53 (1.18)	

Note: For continuous variables, Value is Mean (SD). For categorical variables, Value is Percent.

	Former	Current		
	(N = 1137)	(N = 2696)		
Variable	Percent	Percent		
AGE				
18–29	3.9%	13.3%		
30–39	14.5%	34.0%		
40–49	18.8%	25.1%		
50–64	35.0%	19.5%		
65+	27.8%	8.1%		
CITIZEN				
Yes (Native)	92.3%	94.1%		
Yes (Non-native)	6.3%	4.6%		
No	1.3%	1.3%		
MILITARY	1.370	1.570		
Never	87.8%	82.3%		
Active	2.6%	9.5%		
Veteran	9.6%	8.1%		
GENDER				
Man	50.2%	55.9%		
Woman	49.8%	44.1%		
RACE				
NH-White	77.6%	67.3%		
NH-Black	8.6%	13.6%		
NH-Other	6.9%	8.0%		
Hispanic	6.9%	11.1%		
EE.FT	19.2%	43.2%		
EE.PT	15.9%	18.4%		
EE. TEMP	3.1%	13.1%		
REVENUE				
<1K	29.1%	32.5%		
1K-24K	32.3%	26.4%		
25K–99K				
	24.1%	18.5%		
≥100K	14.5%	22.6%		
PROFIT	<b>00</b> (0)	60 M		
Profits	38.6%	63.4%		
Losses	36.9%	18.7%		
Break even	24.5%	17.9%		
POSTPLAN				
Job.Current	26.5%	25.6%		
Job.New	28.7%	9.5%		
New.Biz	1.2%	14.1%		
Retire	22.5%	34.1%		
School	2.9%	2.6%		
Other	18.1%	14.1%		
PREV.BIZ	25.7%	53.3%		
YR.START				
2000–2009	56.7%	25.0%		
2010–2014	22.5%	20.8%		
2015–2016	9.5%	17.4%		
2013-2010 2017-2018	7.7%	21.4%		
2017-2018	3.6%			
	3.0%	15.4%		
ORIGIN	10 504	25.0%		
Work	40.6%	35.8%		
Sep. Biz	5.8%	26.1%		
Hobby	24.3%	19.0%		
Idea	20.2%	11.7%		
Other	9.1%	7.3%		
INDUSTRY				
Ag/Forest/Fish/Hunt	2.6%	5.6%		
Arts/Ent/Rec	8.2%	8.8%		
Construction	8.9%	11.1%		
Construction	0.970	11.170		

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#### Table 2 (continued)

	Former	Current		
	(N = 1137)	(N = 2696)		
Variable	Percent	Percent		
Fin/Ins	3.7%	6.3%		
Health Care/Soc Assist	7.4%	5.4%		
Information	2.5%	5.2%		
Manufacturing	2.5%	4.5%		
Other	2.8%	4.4%		
Other Services	22.1%	14.5%		
Prof/Sci/Tech Services	8.2%	8.9%		
Real Estate	2.6%	5.3%		
Retail	18.8%	10.4%		
Transport/Warehousing	3.7%	2.3%		
Wholesale Trade	3.1%	2.9%		

tional financing after the initial start-up increases the odds of being CURRENT by 97%. Each additional hour worked in an average work week decreases the odds of being CURRENT by 2% (see Fig. 1). Having the business be the primary source of household income increases the odds of being CURRENT by 31%. Each additional financial challenge and personal support challenge faced by the entrepreneur decrease the odds of being CURRENT by 12% and 16%, respectively. However, each additional economy or market challenge faced by the entrepreneur increases the odds of being CURRENT by 21%. Business operations challenges, customer reach challenges, and business resource/support challenges are not significant. Patterns for each of the six challenge variables are shown in Fig. 2.

#### 1.4. Primary income interaction model

We tested interaction effects involving predictors in the base model, including primary household income (PRIM.INC), additional finance requested (ADD.FIN), business idea source (COLLAB), hours worked (HOURS). Separate models were run with each of these variables as moderators with other relevant independent variables, such as sources of capital and challenges faced. Among those tested, only primary household income evidenced significant interaction effects. Entrepreneurial activities as a primary income source may tend to make financial issues more pressing, make this aspect of self be enacted more regularly, and be a general barrier to exit. Thus, PRIM.INC is likely to shape commitment to the entrepreneur role and could also moderate several other independent variables. First, PRIM.INC could interact with whether the entrepreneur requested additional financing after start-up, ADD.FIN. Second, PRIM.INC could interact with the average number of hours worked, HOURS. Third, PRIM.INC could interact with the number of financial challenges faced, CHLNG.FIN. Finally, PRIM.INC could interact with business idea source, COLLAB. The results are shown in Table 3, Model 2.

All four interactions involving PRIM.INC are significant. Requesting additional financing after the initial start-up increases the odds of being CURRENT by 187% when the business is the primary source of income, but only by 31% when the business is not the primary source of income. Examining the interaction more closely (see Fig. 3) shows that when the business is the primary source of income, requesting additional financing significantly increases the probability of being CURRENT, while the effect is not significant when business is not the primary source of income. For each additional hour worked on average, the odds of being CURRENT decrease by 1% when the business is the primary source of income and by 3% when the business is not the primary source of income. Examining the interaction more closely (see Fig. 4) shows little difference in the probability of being CURRENT until HOURS reaches about 40, at which point the probability of being CURRENT is significantly higher when the business is the primary source of income. For each additional financial challenge faced, the odds of being CURRENT decrease by 20% when the business is the primary source of income and by 4% when not the primary source. Examining the interaction more closely (see Fig. 5) shows that when the business is the primary source of income, increasing financial challenges decrease the probability of being CURRENT. However, when the business is not the primary income source, increased financial challenges have little effect. Finally, when the business is not the source of primary income, coming up with the business idea on their own increases the odds of being CURRENT by 28% compared to coming up with the idea with other(s), but increases the odds by 116% when the business is the source of primary income. Examining the interaction more closely (see Fig. 6) shows that when the business is the primary income source, coming up with the idea alone has a significantly higher probability of being CURRENT than coming up with the idea with others. However, when it is not the primary income source, the probability of being CURRENT is not significantly different based on COLLAB.

#### 2. Discussion

These findings from the EPOP dataset indicate differences between current and former entrepreneurs. Consistent with Identity Theory and Role Exit Theory, there is an interplay of commitment to the entrepreneur role and obstacles encountered. Each of the following increases the likelihood of being a current entrepreneur: having additional sources of personal/business capital, creating the business idea, owning operational space, requesting additional financing, working additional hours, and having the business as primary income source.

#### Table 3

Analysis results.

	Model 1			Model 2		
Variable	OR <sup>a</sup>	SE <sup>a</sup>	p-value	OR <sup>a</sup>	SE <sup>a</sup>	p-value
CAP.PERS	1.59	0.074	< 0.001	1.57	0.075	< 0.001
CAP.BIZ	1.52	0.097	< 0.001	1.52	0.098	< 0.001
CAP.DENY	1.15	0.044	0.001	1.16	0.045	< 0.001
COLLAB	1.15	0.044	0.001	1.10	0.043	< 0.001
Other(s)	_	-	-	-	-	-
Self	1.57	0.121	< 0.001	1.28	0.156	0.113
BIZ.LOC						
Lease	-	-	-	-	-	-
Purch	1.82	0.242	0.014	1.89	0.246	0.010
Residence	2.01	0.159	< 0.001	2.05	0.161	< 0.001
Other	1.61	0.211	0.024	1.62	0.212	0.023
ADD.FIN						
No	_	_	_	_	_	_
Yes	1.97	0.179	< 0.001	1.31	0.251	0.288
HOURS	0.98	0.003	< 0.001	0.97	0.004	< 0.001
PRIM.INC						
No	_	-	-	-	_	-
Yes	1.31	0.135	0.046	0.55	0.296	0.044
CHLNG.FIN	0.88	0.051	0.012	0.96	0.065	0.557
CHLNG.BIZOP	0.99	0.080	0.870	0.99	0.080	0.937
CHLNG.CUST	1.11	0.081	0.182	1.12	0.081	0.161
CHLNG.SUPPBIZ	1.15	0.104	0.190	1.13	0.105	0.248
CHLNG.SUPPPERS	0.84	0.057	0.002	0.83	0.057	0.001
CHLNG.ECMKT	1.21	0.068	0.005	1.23	0.068	0.003
AGE						
18–29	_	-	_	-	-	-
30–39	0.82	0.251	0.440	0.84	0.253	0.502
40–49	0.80	0.254	0.374	0.82	0.256	0.442
50–64	0.40	0.258	< 0.001	0.40	0.260	< 0.001
65+	0.14	0.284	< 0.001	0.14	0.286	< 0.001
GENDER						
Man	-	-	-	-	-	-
Woman	1.31	0.116	0.022	1.33	0.117	0.014
EE.FT						
No	_	_	_	_	_	_
Yes	1.56	0.163	0.006	1.55	0.164	0.008
EE.PT	1100	01100	0.000	1100	01201	0.000
No	-	-	-	-	-	-
Yes	0.66	0.176	0.016	0.63	0.177	0.010
REVENUE						
<1K	-	-	-	-	-	-
1K-24K	0.89	0.149	0.420	0.90	0.150	0.478
25K-99K	0.85	0.174	0.365	0.92	0.176	0.623
≥100K	1.84	0.214	0.004	1.92	0.218	0.003
PROFIT						
Profits	_	_	_	_	_	_
Losses	0.53	0.151	< 0.001	0.54	0.152	< 0.001
Break even	0.76	0.150	0.073	0.77	0.150	0.084
POSTPLAN						
Job.Current	_	-	-	-	_	-
Job.New	0.86	0.179	0.410	0.89	0.180	0.509
New.Biz	16.68	0.334	< 0.001	17.43	0.337	< 0.001
Retire	11.11	0.173	< 0.001	11.77	0.175	< 0.001
School	1.70	0.338	0.118	1.73	0.339	0.107
Other	3.67	0.176	< 0.001	3.78	0.177	< 0.001
PREV.BIZ						
No	-	-	-	-	-	-
Yes	1.53	0.124	< 0.001	1.58	0.125	< 0.001
/R.START						
2000–2009	_	_	_	_	_	_
2010–2014	1.59	0.141	0.001	1.57	0.143	0.001
2010 2011	1.57	0.171	0.001	1.07	0.170	
						(continued on new

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#### Table 3 (continued)

	Model 1			Model 2		
Variable	OR <sup>a</sup>	SE <sup>a</sup>	p-value	OR <sup>a</sup>	SE <sup>a</sup>	p-value
2015–2016	2.38	0.178	< 0.001	2.43	0.180	< 0.001
2017-2018	4.00	0.181	< 0.001	3.92	0.182	< 0.001
2019	6.74	0.232	< 0.001	7.11	0.235	< 0.001
ORIGIN						
Work	-	-	-	-	-	-
Sep. Biz	3.45	0.195	< 0.001	3.50	0.197	< 0.001
Hobby	0.85	0.157	0.288	0.85	0.158	0.293
Idea	0.75	0.164	0.078	0.73	0.165	0.060
Other	1.16	0.215	0.493	1.16	0.215	0.500
INDUSTRY						
Ag/Forest/Fish/Hunt	-	-	-	-	-	_
Arts/Ent/Rec	0.85	0.346	0.630	0.84	0.349	0.629
Construction	0.43	0.355	0.017	0.43	0.357	0.019
Educ Services	0.61	0.414	0.239	0.63	0.418	0.262
Fin/Ins	0.40	0.400	0.022	0.39	0.402	0.020
Health Care/Soc Assist	0.30	0.373	0.001	0.32	0.377	0.002
Information	0.51	0.434	0.120	0.50	0.439	0.118
Manufacturing	0.57	0.441	0.201	0.59	0.445	0.242
Other	0.25	0.431	0.001	0.24	0.433	0.001
Other Services	0.35	0.325	0.001	0.35	0.327	0.001
Prof/Sci/Tech Services	0.58	0.348	0.114	0.57	0.350	0.114
Real Estate	0.62	0.412	0.252	0.65	0.415	0.291
Retail	0.37	0.332	0.003	0.37	0.335	0.003
Transport/Warehousing	0.18	0.425	< 0.001	0.17	0.432	< 0.001
Wholesale Trade	0.59	0.439	0.233	0.59	0.441	0.236
COLLAB*PRIM.INC				1.69	0.237	0.027
ADD.FIN*PRIM.INC				2.19	0.316	0.013
HOURS*PRIM.INC				1.02	0.006	< 0.001
CHLNG.FIN*PRIM.INC				0.83	0.080	0.024
p-value	< 0.001			< 0.001		
McFadden's R <sup>2</sup>	0.446			0.452		
Log-likelihood	-1,094			-1,082		
AIC	2,302			2,286		

 $^{a}$  OR = Odds Ratio, SE = Standard Error.



Fig. 1. Probability of CURRENT based on HOURS.

Per Identity Theory, some of these factors such as requesting financing and working additional hours suggest higher levels of commitment to the entrepreneur role-identity (Burke 2023). As commitment to a given part of self increases, allocations of time and energy tend to manifest in support of future identity enactment and verification from others. Additional sources of financial support and hours worked are thus likely to facilitate venture success and increase the likelihood of observed/inferred feedback that the individual is indeed an "entrepreneur."







Fig. 3. Interaction of ADD.FIN and PRIM.INC on probability of CURRENT.

Per Role Exit Theory, factors such as owning a physical space or having a business be a primary income source may make an individual less likely to exit the role (Ebaugh 1988). Role Exit Theory specifies a number of characteristics of role exits that shape trajectory including voluntariness, or degree of personal agency in the role exit process. Owning a space and/or having a business as sole source of income will make a decision to exit entrepreneurship be less voluntary due to needing to replace earnings and/or negotiate a real estate transaction.

While commitment patterns are relatively reliable and theory consistent, those related to obstacles encountered are quite mixed. Each additional source of start-up capital requested but denied increases the likelihood of being a current entrepreneur. Financial or personal support challenges decrease the likelihood while economic or market challenges increase the likelihood of being a current







Fig. 5. Interaction of CHLNG.FIN and PRIM.INC on probability of CURRENT.

entrepreneur. This suggests that micro-level challenges and meso/macro-level challenges influence entrepreneur role exit differently (Kollman et al., 2017; Justo et al., 2015).

Challenges proximal to the individual are more likely to disrupt entrepreneurial endeavors and raise doubts about the role. This is consistent with Identity Theory in that regular identity enactment and verification from so doing is key to much human behavior (Burke and Stets 2022). Lack of financing received and/or social support is more likely to be interpreted as non-verifying identity feedback than the nature of economic conditions. An ongoing lack of ability to succeed within a role context is likely to increase doubting behavior and likelihood of role exit (Ebaugh 1988). On the other hand, unfavorable economic and employment conditions may make the entrepreneur role more appealing due to lack of alternatives. Per Identity Theory, this circumstance may increase individual commitment to the role making role exit less likely. Per Role Exit Theory, unfavorable economic conditions may lead the entrepreneurial social role to appear to offer productive alternatives for the individual rather than being obstacles fueling doubts. Such economic factors may be expected to tend to make the role more "central" to everyday activities for a given individual and less likely to be exited (Ebaugh 1988).

Primary income source appears to be a modifier of entrepreneur role commitment. When the business is the primary income source, effects of requesting additional financing, working additional hours, and being the only author of a business idea in predicting status as a current entrepreneur become stronger. This suggests that increasing commitment to the entrepreneur role makes exit less likely. However, there appear to be limits to this commitment effect. When business income becomes primary income, additional financial difficulty makes it less likely that an individual will have current entrepreneur status. Commitment to a role context matters but obstacles encountered also shape role exits (Burke and Stets 2022; Ebaugh 1988).

#### 2.1. Implications

Individuals enacting the entrepreneur role may do well to plan, contextualize, and interpret their activities with a deeper understanding of role exit predictors. Intentionally seeking additional financing may contribute to the success of a venture and also deepen



Fig. 6. Interaction of COLLAB and PRIM.INC on probability of CURRENT.

commitment to the entrepreneur role. Choosing to own physical space may have operational benefits and also serve as a barrier to role exit. Committing to having a business as a primary source of income may be a key factor. Essentially, the present exploratory results suggest that entrepreneurs may be able to leverage these relationships to assist in managing their status as an entrepreneur.

Those training future and current entrepreneurs may be able to develop evidence-based curricula with a focus on role exit (Donnellon et al., 2014). The present results suggest that training more resilient entrepreneurs will require instilling data-based expectations. Training should encourage reasonable levels of commitment to the entrepreneur role while also increasing awareness of the obstacles most likely to lead an individual to exit the role. Activities such as program requirements to develop/contact prospective sources of financial support or engage with family members in a training activity would be consistent with the present findings. Such activities may be expected to increase behavioral manifestation of commitment to entrepreneurship and will also assist in coping with obstacles that are likely to be encountered.

Those setting policy to incentivize/facilitate enactment of the entrepreneur role may consider evaluating interventions in terms of ability to increase manifest commitment and decrease unnecessary obstacles. Programs providing financial support to entrepreneurs while providing training in the crafting cases for support are likely to lead more committed to the entrepreneur role while also reducing obstacles to enactment. Efforts to create social support networks for entrepreneurs, perhaps involving family members, are also likely to deepen commitment to the entrepreneur role and reduce obstacles. Incentives to have a business be a sole source of personal income may be a particularly strong type of intervention.

For researchers, the present findings highlight a need to consider a more complete picture of entrepreneur social behavior (Jenkins and Byrne 2021; Justo et al., 2015). Venture successes as well as role commitment and amenable circumstances are likely to influence trajectories of entrepreneurship (Radu-Lefebvre et al., 2021). Future empirical research that builds upon the present findings, leverages theories such as Identity Theory and Role Exit Theory, and integrates extant findings in entrepreneurship may be able to illuminate the life cycle patterns of entrepreneurs. For instance, the present role and role-identity centered approach may be a powerful addition to others with a knowledge-based focus on entrepreneurial exit (Wennberg et al., 2010). Such efforts would be valuable to the advancement and study of entrepreneurship as well as for aspiring/current entrepreneurs, educators, and policymakers.

#### 2.2. Limitations and future research

Theoretical understanding of entrepreneur role exit would benefit from longitudinal empirical evidence that captures all stages of the process while linking concurrent trajectories of a startup and entrepreneur role actor. The current analysis of the EPOP dataset is limited in this regard. Role Exit Theory suggests many patterns through its stage-based process are possible and may include complicated interrelationships between individual-level (e.g., personality or decision-making variables) and contextual effects. Future research should explore the nature of the effects of context extending beyond venture success to include other aspects of a given individual's sense of self and daily life (Wennberg et al., 2010).

The present analysis considered basic demographic data, and some of these such as household size or gender may be linked with the multiple identities of an individual. However, control for these factors was not at the level of the role-identity. Future research should consider effects of concurrent role-identities (e.g., entrepreneur and parent) may hasten or inhibit role exit such as by inducing stress (Wincent and Örtqvist 2009). Doing so with direct measures of role-identity commitment and markers of the reflected social ex-

perience as well as satisfaction, embarrassment, and even neuroses would be consistent with theory (Burke and Stets 2022; Ebaugh 1988). In addition, future research should measure additional personality characteristics such as the Big Five, grit, and/or persistence may be reasonably expected to be linked with role exit tendencies (Boss et al., 2023; Mueller et al., 2017; Leutner et al., 2014).

#### CRediT authorship contribution statement

**Douglas R. Ewing:** Writing – review & editing, Writing – original draft, Project administration, Methodology, Investigation, Conceptualization. **Jeffrey Meyer:** Writing – review & editing, Writing – original draft, Visualization, Formal analysis. **Kirk D. Kern:** Writing – review & editing, Writing – original draft, Conceptualization.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Data availability

https://epop.norc.org/us/en/epop/researchers/public-use-files.html

#### Appendix

Preliminary Analysis.

The purpose of the preliminary model is to reduce the number of control variables to create a more parsimonious model and reduce the number of excluded observations. The preliminary model, which excluded 843 observations due to missing data, showed that the global p-values for CITIZEN (p = 0.201), MILITARY (p = 0.879), RACE (p = 0.540), EE.TEMP (p = 0.532), and URBANIC-ITY (p = 0.987) were all greater than 0.1. When excluding those variables and rerunning the model on the same set of observations, a likelihood ratio test found no significant difference between the models ( $\chi 2 = 6.07$ , p = 00.732). Thus, the model with those control variables removed becomes the base model.

#### Table A1

Independent Variable Definitions

Variable Name	Variable Definition
CAP.PERS	Count of sources of start-up capital used from: Personal/Family Savings; Personal/Family Assets; Personal/Family Home Equity Loan; Personal Credit Card
CAP.BIZ	Count of sources of start-up capital used from: Business Credit Card; Government-Guaranteed Business Loan; Bank Business Loan; Government Business Loan; Family/Friends Business Loan
CAP.DENY	Count of sources of start-up capital requested but not received from: Business Credit Card; Government-Guaranteed Business Loan; Bank Business Loan; Government Business Loan; Family/Friends Business Loan; Investment by Venture Capitalist; Crowdfunding; Grants
COLLAB	Self if business idea was own idea, Others if business was with one or more others
BIZ.LOC	Primary location of the business: Residence for home or residence; Lease for rented or leased space; Purch for space purchased by business; Other for all other locations (client site, co-working space, vehicle, other)
ADD.FIN	Yes if additional financing requested after start-up, No otherwise
HOURS	Average number of hours worked per week in past year (if current) or last year of business (if former)
PRIM.INC	Yes if business is/was primary source of household income, No otherwise
CHLNG.FIN	Count of number of financial challenges currently facing or faced in last year of operation from: Not being able to access health insurance; Not having access to employer-provided benefits; Personal finances; Accessing capital; Making rent payments; Decreasing sales; Increasing business costs
CHLNG.BIZOP	Count of number of business operations challenges currently facing or faced in the last year of operation from: Maintaining business license; Doing taxes; Navigating government regulations
CHLNG.CUST	Count of number of customer reach challenges currently facing or faced in the last year of operation from: Finding customers; Keeping existing customers; Setting up online presence
CHLNG.SUPPBIZ	Count of number of business resource/support challenges currently facing or faced in the last year of operation from: Finding professional support; Finding role models; Getting support from community
CHLNG.SUPPPERS	Count of number of personal resourse/support challenges currently facing or faced in the last year of operation from: Getting support from family/friends; Balancing work and family; Feeling burnt out; Major life event; Finding time
CHLNG.ECMKT	Count of number of economy or market challenges currently facing or faced in the last year of operation from: Finding or retaining qualified employees; Competing against other businesses; Supply chain issues; Decreasing demand for product; Unfavorable economy

#### Table A2

 Control Variable Definitions

 Variable Name
 Variable Definition

 AGE
 Age: 18–29; 30–39; 40–49; 50–64; 65+

 (continued on next page)

#### Table A2 (continued)

Variable Name	Variable Definition
CITIZEN	U.S. citizen status: Yes (Native); Yes (Non-native); No
MILITARY	Military status: Never; Active; Veteran
GENDER	Gender identity: Man; Woman; Non-binary
RACE	Race: Non-Hispanic White; Non-Hispanic Black; Non-Hispanic Other; Hispanic
EE.FT	Business uses full-time employees: Yes; No
EE.PT	Business uses part-time employees: Yes; No
EE.TEMP	Business uses temporary employees: Yes; No
REVENUE	Income or sales/operating revenue in last year/last year of operation: $<1K$ ; 1K–24K; 25K–99K; $\ge$ 100K
PROFIT	Profits in last year or last year of operation: Profits; Losses; Break even
POSTPLAN	Plan/Actual activity immediately after business ends/ended: Continue work at current job; Take/took new job; Start another business; Retire;
	School; Other
PREV.BIZ	Entrepreneur previously owned business prior to focal business: Yes; No
YR.START	Year the business started: 2000–2009; 2010–2014; 2015–2016; 2017–2018; 2019
ORIGIN	Origin of the business: Work activity; Separate business; Hobby/recreational pastime; Idea from self/team; Other (academic, inherited, etc.)
INDUSTRY	Business industry classification

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