Development and Validation of an Authorial Identity Model and Questionnaire: A Factor Analytic Approach

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Abstract

From when the black box of authorial identity has been unpacked, the paucity of the authorial identity model based on a comprehensive theoretical framework addressed the need to establish a robust one (Cheung, Stupple, & Elander, 2015). The current study was comprised of three main phases including hypothesizing a model of authorial identity, developing and validating a questionnaire based on the model, and finally testing the model based on the questionnaire data. The participants, including M.A. and Ph.D. students, were 30 for initial piloting, 60 for reliability estimation, 140 for exploratory factor analysis, and 175 for confirmatory factor analysis. At first, drawing on Ivanič's (1998) model of writer identity and Prior's (2001) ways of classifying voice, reviewing the related literature, and consulting with a cadre of experts, a model of authorial identity was proposed. Secondly, a questionnaire was developed and validated based on the hypothesized model. The reliability of the questionnaire, estimated through Cronbach's alpha, was 0.73. Following that, exploratory factor analysis identified four components, namely *authorial voice and identity, authorial persona, authorial background,* and *authorial style*. Ultimately, SEM was run using AMOS in the confirmatory factor analysis phase to test the model. The results of this multi-phase research are presented and discussed for underlining the key role of authorial identity in academic writing for both novice and professional academicians.

Keywords: Academic writing, Authorial identity, Exploratory factor analysis, Confirmatory factor analysis

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INTRODUCTION

Academic writing has assumed considerable importance in recent years as countless second language (L2) learners have been struggling to earn the proficiency and fluency to "understand their disciplines, establish their careers, or to successfully navigate their learning" in academic milieus (Hyland, 2018, p. 7). With the mounting increase in academic publications and an ever-growing concern for academic literacy and plagiarism in recent years, investigating academic writers' authorial identity and authorial voice can be significant. Traditionally, academic writing, the primary medium that enables writers to join the academic discourse community, was viewed as an esoteric type of writing that included features such as impersonality, hedging, and formality (Shaw & Liu, 1998) where adopting a personal stance and using personal pronouns was prohibited. Nevertheless, in recent decades, the interrelationship among academic writing, discourse, and identity has instigated academicians to view academic writing as an interactive act involving identity issues.

According to Hyland (2002), academic writing cannot be limited to content conveyance but can be viewed as the act of identity, a process of self-reflection, and the authors' ability to construct a valid self and representation of the writer in their text. In this spirit, academic writers' ability to construct a valid representation of themselves and to align with socially shaped identities is the core element of their pragmatic competence. Hence, identity in academic writing can be viewed as what we do, rather than what we have. As Hyland (2015) denoted, "almost everything we say or write, in fact, says something about us and the kind of relationship we want to establish with others" (p. 70).

In today's academic milieu, in which there is more pressure on authors to publish in prestigious journals, novice writers usually see themselves in a no-win situation whereby they cannot represent their true 'selves' in their texts (Ivanič, 1998). This issue poses a tough challenge to novice writers as they realize that their discipline conventions support

identities that are different from their own. Therefore, early-career academics are mostly uncertain about who they are expected to be in their academic texts. Consequently, "they feel more constructed by text than constructing them" (Hyland, 2015, p. 72). This prevents them from communicating properly with their readers and undermines their interaction through written discourse. In fact, a plethora of factors work hand in hand to make an untrained university student morph into a professional academic writer. Besides knowledge of the discipline and language proficiency, individuals' authorial identity and voice can figure largely in academic writing. Although controversy still exists among researchers on the definition of authorial identity, Pittam, Elander, Lusher, Fox, and Payne (2009, p. 154) defined it as "a sense a writer has of themselves as an author and the textual identity they construct".

Nowadays, as a consequence of a pressing need for academic publishing and occasionally free access to online sources, plagiarism has presented a threat to academic integrity. Such a sensitive matter has provoked reactions on the part of academicians to take heed of academic integrity more seriously and to lessen the possibility of plagiarism or word theft in the academic context. Wilson Mizner's caustic humor (as cited in Shokraneh & Khan, 2009), "if you steal from one author it's plagiarism; if you steal from many it's research", denotes the rampant practice of this phenomenon. As a global issue, plagiarism has been addressed with various names in the literature including imitation, literary theft, faulty citation, and cheating (Marsh, 2012). Bailey (2011, p. 30), however, defined it as "taking ideas or words from a source without giving credit (acknowledgment) to the author". What all plagiarism definitions have in common is viewing it as a fraud. Having said that, plagiarism is not always intentionally applied, but largely rooted in academic writers' lack of awareness of their role and their underdeveloped authorial identity. As Abasi, Akbari, and Graves (2006) put it, in the early stages of academic programs, students might be unaware of the valued identity of an academic writer. One of the costly consequences of this lack of awareness can be the charge of plagiarism. Thus, unintentional

plagiarism is a knottier problem to deal with, as it is more problematic to deter students from doing something that they are not aware of (Cheung, 2012).

Accordingly, the problem is that academic writer's unawareness about their role and identity as an academic writer, disciplinary conventions, the charge of plagiarism, and negative consequences of not being able to be a member of an academic discourse community are all rooted in the absence of a scale for measuring authorial identity. This problem triggered our interest to address the gap in the literature, the lack of a robust model of authorial identity, and to conduct this project as it may play a vital role in proposing a solution to the above-mentioned problems of today's academic writers. In the following sections, we give an overview of the theoretical underpinnings as well as background information about the authorial identity and authorial voice. Following that, we discuss the methodology and data gathering procedure. Finally, we will cast light on findings and discussion as well as what the study adds to the literature.

LITERATURE REVIEW

Theoretical Underpinnings

Writer Identity

Identity can be defined and conceptualized from different perspectives. According to Greek etymology, *'identitas'* refers to oneness, meaning that each individual is unique and has special characteristics that make him/her different from other people (Olmos Lopez, 2015). While the interrelationship between writing, identity, and discourse has been the focus of many studies (Abasi et al., 2006; Cheung, Stupple, Elander, & Flay, 2016; Hyland, 2005) in the past few years, one of the most influential models of writer identity has been proposed by Ivanič (1998). Ivanič's (1998) model of writer identity is much broader than the available authorial identity models in the literature. Accordingly, the chief reason for choosing this model as the theoretical framework is the hierarchical relationship

between authorial and writer identity. As can be inferred from the literature, writer identity is an all-embracing term covering the entire components and issues related to writing and identity, especially authorial identity. Therefore, what the literature lacks in this research agenda is a model that has its roots in a strong theoretical framework. According to Ivanič's (1998) writer identity model (Figure 1), writer identity is comprised of three main components: 'autobiographical self', 'discoursal self', and 'self as author', which are inseparable and affected by the available possibilities for self-hood in sociocultural contexts.

According to Clark and Ivanič (1997), possibilities for self-hood is the most abstract aspect of writer identity in that they are not individual writers' characteristics; nevertheless, "subject positions are possibilities for self-hood that exist in the sociocultural context of writing, both the broader context of society at large and the more specific institutional context of a particular act of writing" (p. 136). Concerning academic writing, they are available identities in the social context of academic writing that are adopted by academic writers when engaging in the conventionalized social process of writing (Ivanič, 1998). Although this aspect is one of abstraction, it is also the most influential one in nature, thereby shaping academic writers' writer identity.
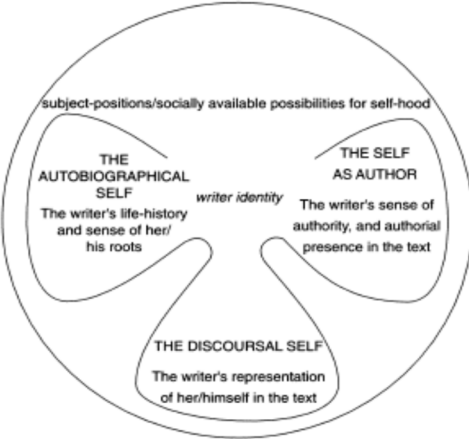

Figure 1: Aspects of writer identity (Clark & Ivanič, 1997, p. 137)

The first component of Ivanič's (1998) model is the *autobiographical self* which is defined as "the identity which people bring with them to any act of writing, shaped as it is by their prior social and discoursal history" (p. 24). As Prior (2001) argued, each individual has unique life experiences that directly affect his/her writing. Therefore, autobiographical self is concerned with the way a writer's writer identity is affected by their life history and socially available possibilities for self-hood. Ivanič (1998, p. 24) further noted that:

> The term 'autobiographical self' emphasizes the fact that this aspect of identity is associated with a writer's sense of their roots, of where they are coming from, and that this identity they bring with them to writing is itself socially constructed and constantly changing as a consequence of their developing life-history: it is not some fixed, essential 'real self'.

The second component of Ivanič's (1998) model is called *discoursal self,* which is concerned with how academic writers use discoursal elements to convey a message about themselves. This component is directly related to Hyland's (2002) belief, suggesting that academic writing is not confined to content conveyance, but mirrors the fingerprint message of the writer as well. It is important to note that this aspect of writer identity is directly related to the concept of voice in that through using available discoursal resources, academic writers can represent their authorial identity and authorial voice in their texts (Clark & Ivanič, 1997). Writers' access to discoursal resources is also affected by the available possibilities for self-hood to which they were exposed in their lives. Therefore, by having different autobiographical selves, academic writers show different pictures of their real selves in the text.

The last component of Ivanič's model is called *self as an author*

which is concerned with the degree to which academic writers claim authority or take an authorial stance towards what they write, and establish an authorial presence in their writing (Ivanič, 1998). She further argued that this aspect mainly concentrates on the degree to which the academic writers efface themselves by attributing ideas to other authorities, or alternatively, take a strong authorial stance in their writing; whether they present ideas as objective truth or take responsibility for their authorship. As Clark and Ivanič (1997) noted:

> This aspect of writer identity is more to do with writers having their 'own voice' in the sense of its content rather than its form. The writer's 'voice' in this sense means expressing their own ideas and beliefs. This is what people usually first think of as 'writer identity': whether the writer is present in the writing with a strong authorial voice or not: whether s/he is *saying* something (p.   152).

Authorial Voice

As the literature suggests (Elbow, 1994; Jiang & Hyland, 2015; Matsuda & Tardy, 2007), voice is crucially important in academic writing. The concept of voice is different from identity in that identity is an umbrella concept for expression of self and voice is concerned with the way that expression is perceived by an audience (Olmos Lopez, 2015). Akin to the concept of writer identity, different conceptualizations of voice have been offered by scholars in recent years. Clark and Ivanič (1997), for instance, considered two aspects for the concept of voice: "voice as form" which is concerned with discoursal features through which the writers represent themselves in texts, and "voice as content" which concerns the writers' expression of their own words and ideas in texts (p. 151). Ramanathan and Akinson (1999) also defined voice by relating it to the ideology of individualization, arguing that through using voice, individuals give an expression of their inner selves.

In a seminal paper entitled 'voices in text, mind, and society', Prior (2001) discussed three key ways through which the concept of voice can be

understood, including voice as an individualistic discourse system, voice as a social discourse system, and voice as a socio-individual discourse system. Because of the importance of this classification in the model we are going to present in this research, defining its key components seems crucial. To begin with, the first approach to understand voice is individualistic in nature in that through using available discoursal resources, writers can express their ideas in their own words. As Ivanič (1998) further noted, "writers have ideas, and particularly ways of talking which are in some way their own" (p. 95). Ramanathan and Akinson (1999) also viewed voice as the "expressive potential of a unique individual" (p. 50). Therefore, the first approach suggests that voice is something idiosyncratic that is unique and different from person to person.

The second approach is more socially oriented, suggesting that academic writers' authorial voice is the product of the possibilities for self-hood, to which they were exposed during their lives (Ivanič, 1998). Therefore, the second approach indicates that the authorial voice is always being reconstructed by the available possibilities for self-hood and available discourses in the social context. The third approach views voice as something reflected and projected onto the writers' production while engaging in academic writing. This approach is both individualistic and socially oriented in that, as Ivanič's (1998) autobiographical self, it considers voice as a product of individual background and experiences concerning the social setting that they are exposed to (Olmos Lopez 2015). In the current study, we are going to propose a model and questionnaire of authorial identity based on the theoretical framework discussed in Prior's (2001) and Ivanič's (1998) conceptualizations of authorial voice and writer identity.

Previous Research

Authorial identity, authorial voice, and plagiarism have been the focus of a good number studies (Abasi et al., 2006; Ballantine, Guo, & Larres, 2015; Cheung, 2012; Cheung et al., 2015; Cheung et al., 2016; Elander, Pittam,

Lusher, Fox, & Payne, 2010; Flowerdew & Li, 2007; Hyland, 2002, 2005, 2018; Ivanič, 1994; Ivanič & Camps, 2001; Pittam et al., 2009) in recent years. Different researchers have explored writer identity, authorial identity, and authorial voice through different approaches. In their study, Cheung et al. (2016) argued that "an authorial writer was seen as having confidence in writing, valuing writing, taking ownership of their writing, thinking in an authorial way, and having rhetorical writing goals" (p. 11).

Viewing authorial identity as a psychological construct, Cheung et al. (2015) developed and validated students' attitudes and beliefs about the authorship scale (SABAS) as an alternative to students' authorship scale (SAQ) developed by Pittam et al. (2009). They noted that unintentional plagiarism could be lessened by helping students to better understand their authorial role in the production of their university assignments. In another study, Elander et al. (2010) evaluated an intervention to help students avoid unintentional plagiarism by improving their authorial identity. Rather than focusing on the practices associated with plagiarism that they should avoid, the intervention aimed at encouraging students to see themselves as authors and understand what being an author involves in positive terms. The results of the study showed that the intervention had an important role in making students avoid unintentional plagiarism by adopting a more authorial role in their academic writing. In a similar vein, by conceptualizing academic writing as "artifacts-in-activity", Castello and Inesta (2012) conducted a series of studies to develop and analyze various interventions aimed at developing students' authorial identity and authorial voice. They defined academic writing as "central ingredients around which the meaning construction process that the research and writing activities involve is articulated and whereby the author's discoursal identity is forged and made visible to the readers" (p. 181). As Tang and John (1999) pointed out, academic writing programs in university should address/value writer identity in a way that learners are required to be critical writers and thinkers. Thence, learners are supposed to be actively involved in reflecting language choices of their own, creating meanings that they wish to imply, and finally

representing selves that they feel a belonging to in their papers. Pittam et al. (2009) also mentioned that authorial identity is linked to unintentional plagiarism such that if the former is poorly developed the latter is more likely to happen.

Investigating authorial identity from a corpus-based perspective, Hyland (2001) argued that academic writers' discoursal choices to present themselves in their text affect the way their message is understood by readers. Similarly, by employing a corpus-based approach to investigate writers' use of personal pronouns to create a self-promotional tenor in their texts, Harwood (2005) indicated that the promotional effect achieved by the combination of personal pronouns and self-citation operates at two levels. At one level, writers make readers aware of their other works, and at another level, they demonstrate themselves as an established figure in the field. Hyland and Tse (2005) mentioned that evaluative that construction, as an important interpersonal feature allows academic writers to present their findings, comment on them, evaluate them, and interact with their readers, and additionally provides for a rich resource that would help them comment on their work or that of others, manage their discourse, and signal a clear stance towards the information itself. All in all, authorial identity is an elusive concept that requires further attention as undergraduate students are empowered to appreciate their role as an author, and project their voice more strongly in their texts. Accordingly, this study addressed the available gap by developing a new model and questionnaire of authorial identity to help academicians explore this issue more deeply.

PURPOSE OF THE STUDY

Research on voice and identity suggests that non-native writers lack a good understanding of authorial voice and its identification with the author, the absence of which can be deleterious because it both hinders the identity projection on the part of the writers and is hazardous to their academic integrity. What is more, as can be inferred from the previous section, research on authorial identity and voice in non-English speaking contexts is

still young and slender, which has turned this concept into a black box among academia. Therefore, as a psychological construct, authorial identity should be properly introduced to help novice writers join the academic enterprise (Bartholomae, 1986). This can be achieved by helping academic writers understand more of their role as an author and improve their authorial identity. In so doing, a valid measure of authorial identity is needed.

Although several models have been previously proposed, a more robust and comprehensive model of authorial identity not only can broaden the understanding of academicians about this construct and its main components but also can remedy the shortcomings of the previous models. That is to say, what is missing in the literature is an authorial identity model, which is not only statistically rigorous but also has a strong theoretical underpinning. Thus, the main rationale for conducting this study was to look into the concept of authorial identity through developing a model to help novice ones understand the identity and voice of an author. To this end, this study followed four objectives. First, we developed a hypothesized model of authorial identity. Second, a questionnaire was developed and validated to test the hypothesized model. Third, using the questionnaire data, we investigated the extent to which the model fitted the data. Finally, and grounded on this proposed model, a new definition of an authorial writer has been proffered.

METHOD

A large number of studies have researched authorial identity through various methodological approaches including corpus studies, interviews, and other quantitative and qualitative methods. Although qualitative approaches help researchers to delve more deeply into a given issue, they are time-consuming and often suffer from generalizability problems. Therefore, validated questionnaires can be a good solution to gather a large amount of data over a short period of time. Although some previous researchers (Ballantine et al., 2015; Cheung et al., 2015; Pittam et al., 2009) have

developed or used questionnaires to investigate authorial identity, more research is still required to complement the findings of previous studies and broaden the academicians' understanding of authorial identity in new academic contexts.

In order to propose a model of authorial identity for academic writers, the present study went through systematic and rigorous steps based on the instructions in the literature (Dörnyei, 2010). At first the relevant literature—especially the previous models, theories, and questionnaires (e.g. SABAS and SAQ)—was perused to avoid unintended replication. Ivanič's (1998) model of writer identity (Figure 1), and Prior's (2001) three key ways of understanding voice set up the theoretical foundation of the current model of authorial identity. Furthermore, in her seminal book entitled *writing and identity*, Ivanič (1998) classified the ways of discussing identity among which *persona* and *self* are of utmost importance. To her, the self is an important aspect of identity concerned with individuals' feelings. Goffman (1959) noted that there are multiple selves in the society through which our unique self will be shaped according to different contexts. Therefore, the self is a unique entity which distinguishes individuals from each other. Persona also refers to the social roles the writers reflect in their writings. According to Olmos Lopez (2015), the writer produces writings in which his/her persona is exhibited. By developing the issue of persona in written discourse in terms of writer identity, Cherry (1998) defined persona as the authors' ability to "portray the elements of the rhetorical situation to the writer's advantage by fulfilling or creating a certain role, in the discourse community" (p. 265). After reviewing the theories and models introduced earlier, a number of components were specified to establish the structure of authorial identity. Subsequently, a group of experts—from the domains of second language writing, statistics, and writer identity—was consulted, through online and face-to-face negotiation, to confirm the appropriateness and accuracy of the newly developed components. After these consultations, the components were re-specified to have the most appropriate components for further analysis. Following that, four

components of authorial identity were drafted, namely, *authorial voice and identity, authorial background, authorial persona,* and *authorial style.*

The authorial voice and identity component can show the level of academic writers' writer identity and their tendency to reflect their unique voice in their texts. Although authorial voice and authorial identity are mostly viewed as separated constructs, they are considered as a unitary component co-constructing each other in the current model of authorial identity. This component can clarify whether academic writers are creators of novel ideas by having their voice, or just amalgamators of others' ideas by distancing themselves from what they write. In other words, it can show whether academic writers signal their presence and represent their identity as an author by making their voice heard more than others, or refuse to establish a stance for themselves in their writing. This component includes all variables that affect writers' self-representation and the extent to which they can reflect their unique selves in academic texts. Therefore, it can be considered as an umbrella term covering all components of Ivanič's (1998) model of writer identity and Prior's (2001) three key ways of understanding authorial voice.

The second component, i.e., authorial background, is theoretically based on Ivanič's (1998) *autobiographical self* and Prior's (2001) third way of understanding voice, rendering it a social-individual product. This component refers to the extent to which academic writers' life experiences are reflected in their text and how such experiences affect their authorial presence. Clark and Ivanič (1997) regard it as the most intuitively obvious meaning of writer identity. As a result of differing life experiences, individuals identify with particular identities and subject positions significantly affecting their approach to all aspects of social life, including academic writing (Prior, 2001). According to this model, academic writers' authorial background is always in a process of reconstruction through available possibilities for self-hood. Therefore, they may create different representations of themselves according to their autobiographical changes. As Ivanič (1998) noted, academic writers may be authoritative in one text

and unauthoritative in another according to their autobiographical changes. Succinctly, this component is called authorial background because it can show how academic writing is affected by the writers' life history and experiences which are always being reconstructed by available possibilities for self-hood throughout their lives.

The third component, *authorial persona,* can indicate the extent to which academic writers exhibit their persona and signal their presence and role in their texts. As Elliot (1982) mentioned, the persona can be used to clarify the relationship between academic writers and the character they produce through their writing. This component is also based on Ivanič's (1998) *discoursal self* in that through using available discoursal resources, academic writers construct and exhibit their authorial persona in their texts. The interesting point worth mentioning here is that, similar to other components of the current authorial identity model, academic writers do not create and reflect their authorial persona in a vacuum; rather, they do so by drawing on the available possibilities for self-hood including abstract conventions working as building materials for self-representation in texts (Clark & Ivanič, 1997). A writer might adopt several *personae* in various texts in a way that he/she might construct a valid and authoritative self in one text depending on the disciplinary conventions or might refuse to establish an authorial persona in others.

The last component, *authorial style*, is theoretically based on Ivanič's (1998) view that "writers have ideas and, particularly, ways of talking which are in some way their own" (p. 95). As noted before, novice writers approach academic writing with a sense that they have nothing worth saying in their own words. Hence, this component is related to Ivanič (1998) self as an author who is concerned with the degree to which academic writers claim authority and establish an authorial presence in their text. This component is what people think a qualified writer should have because by having a unique authorial style, readers can find out whether the writer is conveying their ideas in their style or not. Another element of authorial style is related to the degree to which academic writers use

available discoursal resources to foster a unique authorial style for themselves and make their authorial voice heard more than others in the text. According to Clark and Ivanič (1997), fostering a unique authorial style in academic writing enables writers to put themselves at the center of the writing and establish a presence within it. This component is also related to voice as a form which is concerned with discoursal and stylistic features through which the writers represent themselves in texts (Clark & Ivanič, 1997). Table 1 shows the components of authorial identity and their definitions. This tentative model sets the basis for developing an instrument for academic writers' authorial identity.

Table 1: The hypothesized model with components and definitions

Component	Definition
Authorial Voice and Identity	This component indicates how academic writers signal their presence and represent their identity as an author by making their voices heard more than others in their texts.
Authorial Background	This component shows how academic writers' authorial identity is affected by their life history and experiences which are constructed and reconstructed by available possibilities for self-hood throughout their lives.
Authorial Persona	This component reveals whether academic writers remove themselves from their texts, or exhibit their persona as an academic writer by signaling their presence and role in their writing.
Authorial Style	This component signals how discoursal, contextual, and stylistic features together with available possibilities for self-hood, shape academic writers' authorial style as an important component of authorial identity.

Instrument Development

Participants

The participants of the current study were male and female MA and Ph.D. students as well as professors of English Literature and Teaching English as a Foreign Language (TEFL) from a number of public universities in Iran. First, 30 respondents, M.A and Ph.D. of TEFL, completed the questionnaire in the initial piloting phase to prepare the final draft of the questionnaire for the reliability phase. In the reliability estimation phase, 60 participants

completed the questionnaire in online and printed versions. To confirm the construct validity of the newly developed questionnaire, two groups of participants completed the questionnaire in the exploratory and confirmatory factor analysis phase. 140 respondents completed the questionnaire in online administration in the exploratory factor analysis phase. In the confirmatory factor analysis phase, the questionnaire was uploaded online (www.docs.google.com) and administered to 175 respondents with similar educational levels from public universities in Iran.

Data Collection Procedure

To test the hypothesized model of authorial identity described in the previous section, an attempt was made to develop and validate a questionnaire. Initially, we reviewed the literature to identify the available instruments, on the one hand, and establish a justifiable theoretical framework for their instrument on the other. Therefore, by reviewing the available literature, we generated an item pool based on the hypothesized model of authorial identity. The primary goal in this step was to generate the most appropriate, accurate, and representative type of items in order to constitute the body of the questionnaire. The rating scale used in the current study was a seven-point Likert-type scale including *strongly agree, agree, slightly agree, uncertain, slightly disagree, disagree,* and *strongly disagree* options. In the scoring process, 'strongly agree' received seven points, 'agree' six points, 'slightly agree' five points, and so on. Scoring was reversed for the negatively worded items. In the current questionnaire, information about gender, educational level, and age constituted the personal demographic information section.

After the initial item generation, we consulted a panel of five experts—from the fields of second language writing, statistics, and authorial identity—and 15 non-experts, who were M.A. students of TEFL and English literature, to check the appropriateness, accuracy, and intelligibility of the items. In this process, this cadre of experts was requested to rate the

items on a scale from one to five, where five meant '*highly important to be included*' and one '*not important to be included*'. Following that, items receiving 75% of acceptability rates were maintained for further analysis; hence, the number of items was reduced from 36 to 25.

After receiving the comments from both experts and non-experts, we revised the items and a final draft of the questionnaire was prepared for initial piloting. The questionnaire, comprising 25 items, was then piloted on 30 respondents who were similar to the target population. The piloting was conducted by hand since the respondents were requested to write their comments on the problematic or ambiguous items. Using respondents' useful comments, some minor modifications were made to the items and a new draft of the questionnaire with 22 items was drawn up.

RESULTS

In order to measure the internal consistency of the questionnaire, Cronbach's alpha coefficient was used. The 22-item questionnaire was administered online to 60 M.A. and Ph.D. candidates introduced earlier. The results for the Cronbach's Alpha showed a less than acceptable internal consistency index of 0.62. The output indicated that two of the items considerably reduced the reliability of the questionnaire. By excluding those two items, the index rose to an acceptable 0.73. Thus, after the reliability estimation step, a new draft of the questionnaire with 20 items was prepared.

In order to assess the validity of the current questionnaire, three categories of face, content, and construct validity were checked. As for face validity, we took two major steps. First, an engaging layout, font type, and format were used for traditional administration. Moreover, an appealing webpage color and pattern was used for online administration. To determine the content validity of the questionnaire, a panel of experts and non-experts were requested to comment on the items. Non-experts were requested to fill in the questionnaire through a think-aloud technique to detect the problematic items. To establish the construct validity of the questionnaire,

we made two rigorous steps: an exploratory and confirmatory factor analysis.

For the Exploratory Factor Analysis (EFA), at first, the suitability of data for factor analysis was checked. To this end, following Pallant's (2007) instructions, sample size and association among variables were checked. Regarding sample size, one-hundred and forty respondents completed the questionnaire at the exploratory phase. Regarding the second criterion, Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) were checked to ascertain the factorability of the data. As shown in Table 2, the KMO measure (KMO= .92) and Bartlett's test of sphericity (p=0.00)— indicated the suitability of the data for factor analysis.

Table 2: KMO and Bartlett's test results

Statistical Test	Level
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	.928
Bartlett's Test of Sphericity Approx. Chi-Square	1956.707
df	190
Sig.	.000

After checking the factorability of the data, the exploratory approach of principal components analysis (PCA) using the oblique rotation method of Direct Oblimin was utilized to decide on the number of factors to be extracted, whereby only items with eigenvalues of above one were selected using Kaiser's Criterion. Table 3 indicates the number of factors that met this criterion.

Accordingly, as the Kaiser's Criterion in Table 3 indicates, four factors with eigenvalues above 1 were extracted accounting for 63.98% of the total variance. These four factors defined 29.75%, 13.06%, 12.84%, and 8.32% of the total variance, respectively. Table 4 presents the factor loadings and their degree for each of the four factors. Although some of the items loaded on one component, cross-loadings were also observed in others.

Table 3: The number of factors based on Kaiser's criterion

	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	9.341	46.704	46.704	9.341	46.704	46.704	5.950	29.752	29.752
2	1.281	6.407	53.110	1.281	6.407	53.110	2.613	13.067	42.819
3	1.137	5.683	58.794	1.137	5.683	58.794	2.569	12.844	55.663
4	1.039	5.196	63.989	1.039	5.196	63.989	1.665	8.326	63.989
5	.812	4.059	68.048						
6	.720	3.598	71.647						
7	.654	3.268	74.915						

Table 4: Factor loadings results

	Component			
	1	2	3	4
q1	**.507**	.012	.213	.103
q2	**.590**	.136	.437	.125
q3	.145	.220	**.734**	.237
q4	.210	.196	.324	**.722**
q5	-.195	-**.543**	-.234	-.127
q6	**.687**	.050	.311	.108
q7	.176	.241	**.589**	.024
q8	-.235	-**.766**	-.162	-.271
q9	.012	.172	**.546**	.201
q10	-.082	-**.485**	-.149	-.098
q11	**.723**	.237	.193	.116
q12	.298	.174	.324	**.805**
q13	**.699**	.257	.073	.146
q14	**.764**	.183	.098	.207
q15	**.669**	.329	.193	.225
q16	**.582**	.046	.098	.286
q17	**.742**	.382	.107	.238
q18	**.756**	.069	.234	.156
q19	-.085	-**.789**	-.341	-.162
q20	**.603**	.084	.248	.182

Furthermore, although the ensuing scree plot (Figure 2) generated as
many as five components, and a parallel analysis allowed for as few as one

component, the four-factor solution suggested by PCA's eigenvalue indices was eventually adopted which was more conveniently aligned with the theoretical framework in question.

Figure 2: Scree plot test

Most of the cross-loadings were ignored as they were loaded more strongly on one factor. However, three cross-loadings which were nearly equal across two factors remained to be examined. For example, item 2 loaded on the first and the third factor because based on Ivanič's (1998) model there was a strong interrelationship between these two factors. Therefore, after analyzing the factor loadings, the final version of the questionnaire was created for confirmatory factor analysis. Table 5 shows the questionnaire components, their related items, and reliability indices for each of them.

Table 5: Questionnaire components, their related items, and reliability indices

Component	Questionnaire Item	Reliability
Authorial Voice and Identity	1. It is important for me to have my own voice in academic writing as an author. 2. Academic writing is all about the writer's self-representation through language. 6. I take a strong authorial stance in my academic writing. 13. As an academic writer, I make my voice heard more than others in academic writing. 14. I do not limit myself to communicating some messages in academic writing. I also like to present my voice and identity as an academic writer. 15. If someone reads my academic writing, they can recognize my reflected voice and identity as an author in it. 16. I enjoy conveying ideas through my own voice in academic writing. 17. I have my own identity as an academic writer. 18. My presence in my academic writing is affected by my authorial identity. 20. Using academic writing strategies, I project my authoritative voice and identity as an author in texts. 11. Academic writing is a platform through which I can assert my own unique authorial voice and identity in texts.	0.92
Content	5. It is a useful strategy to remove yourself from your text as an author in academic writing. 8. I think I have nothing worth saying in my words in academic writing. 10. It is not important for me to reflect myself in academic writing. 19. I find it difficult to express ideas in my own words while I am writing academically.	0.77
Authorial Background	3. My self-representation in academic writing is affected by the discourses I have been exposed to in my life. 7. My previous life experiences gradually shaped my authorial identity. 9. My identity as an academic writer has been always in a process of reshaping through my life history and experiences.	0.69
Authorial Style	4. Using my unique academic writing style, I can reflect my identity as an author in texts. 12. Writing academically in my style helps me to establish a valid self as an academic writer.	0.63

As the last phase of the validation process, confirmatory factor analysis was run to examine whether the questionnaire would fit the hypothesized model of authorial identity. To this end, the questionnaire was uploaded online (www.docs.google.com) and administered to 175 respondents, who were M.A. and Ph.D. students of TEFL and English literature in Iran. Prior to the analysis, the data were screened to check their multidimensional normality. The output indicated that both skewness and kurtosis indices fell within the acceptable range (-3<Skewness<+3; -5<Kurtosis<+5). Subsequently, through the AMOS package, Confirmatory Factor Analysis (CFA) was applied to investigate the relationship between the questionnaire items for authorial identity and the authorial identity model hypothesized a priori at the outset of the study.

In the current study, we adopted Kline's (2005) suggestions for reporting the model fitness, who advocated the use of the Chi-Square test, the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI) and the Standardized Root Mean Square Residual (SRMR). Despite following Kline's (2005) suggestions, we decided not to use the Chi-Square test in reporting the model fitness as it suffers from certain limitations. One limitation of the Chi-Square test is that when the sample size is not large—as in the current study—it is not a powerful measure of model fitness (Kenny & McCoach, 2003). As Hooper, Coughlan, and Mullen (2008) mentioned, RMSEA values less than 0.08 indicate a well-fitting model. Regarding SRMR, ranging from zero to 1, as Byrne noted (1998), values equal or less than 0.05 show a well-fitting model. Finally, $CFI \geq 0.90$ would constitute a well-fitting model. Therefore,

- Root mean square error of approximation (RMSEA) < 0.08 shows an acceptable fit
- Comparative fit index (CFI) ≥ 0.90 is considered as a good fit.
- Standardized root mean square residual (SRMR) ≤ 0.05 indicates a well-fitting model

The output of the CFA, as shown in Table 6, for the current study indicated RMSEA= 0.04, CFI= 0.95, and SRMR= 0.03, all of which are

within the acceptable range mentioned above. The model was run only once at the CFA phase as all correlation indices between the components and the items were over 0.5. All statistical indices reveal that the data gathered through the developed questionnaire fit the authorial identity model proposed at the outset of the study, indicating that the resulting model is fit. Figure 3 shows the schematic representation of the authorial identity model in the present study.

Table 6: Summary of the SEM results

Teachers	Current Level	Accepted Level
RMSEA	0.04	< 0.08
CFI	0.95	≥ 0.90
SRMR	0.03	≤ 0.05

DISCUSSION

In the current study, we aimed at proposing a model of authorial identity, testing its fitness through constructing a questionnaire, and finally proposing a new definition of an authorial writer. Initially, based on Ivanič's (1998) model of writer identity and Prior's (2001) key ways of understanding voice, we proposed a model of authorial identity comprising four components including *authorial voice and identity*, *authorial persona*, *authorial background*, and *authorial style*. Subsequently, we developed and validated a 20-item questionnaire based on the proposed model of authorial identity. The results of the factor analyses showed that the proposed model enjoyed a satisfying level of validity as confirmed by the statistical indices. Finally, according to the developed model of authorial identity in this study we believe that authorial academic writers are individuals whose authorial background, which is constantly reconstructed through possibilities for self-hood, enables them to foster a unique authorial style. In this spirit, they can project a distinctive authorial voice and identity and also can construct a valid authorial persona in their academic texts.
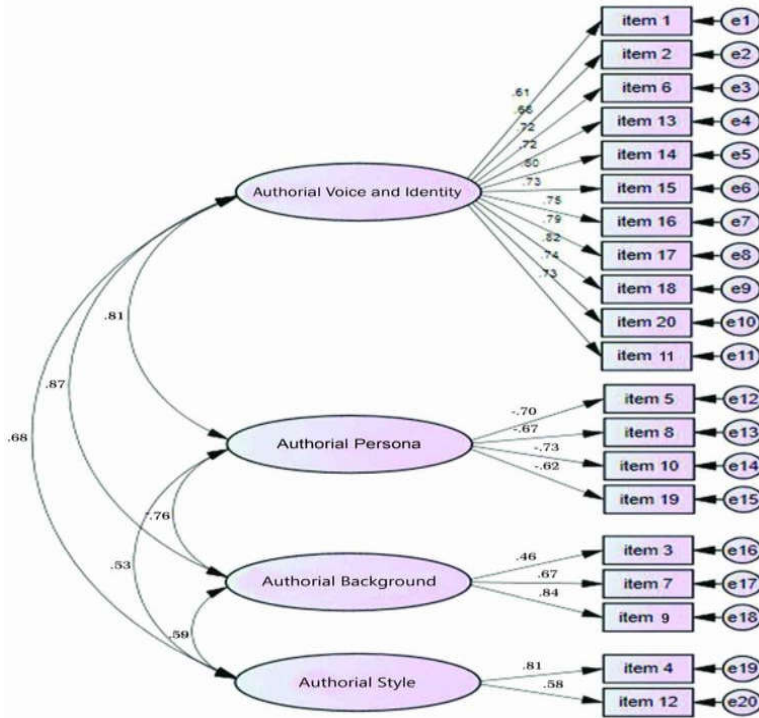
Figure 3: AMOS output of schematic representation of authorial identity model

In this model, academic writers' authorial identity is viewed as an abstract fluid characteristic that is always in a process of reshaping through available possibilities for self-hood in society. Ivanič (1998) underscored that writers' discoursal self, autobiographical self, and self as the author are always in a process of reconstruction through available possibilities for self-hood in their lives. Similar to her, we believe that authorial identity is not something that writers are born with; rather, it is an aspect of identity that they should construct and foster during their academic lives.

In the model offered in the present study, we drew on Prior's (2001) classification in viewing authorial voice as a social-individual concept. This

model suggests that, through using available discoursal resources, academic writers can project their authorial voice and identity; in addition, they make their voice heard more than others in their texts. Therefore, their authorial voice is always in a process of reshaping through socially available discoursal resources of academic writing and possibilities for self-hood. On the other hand, voice is an individual concept in that despite drawing on the socially available discoursal resources, academic writers can project their authoritative voice in texts. Succinctly, the proposed model of authorial identity views authorial identity and authorial voice as socio-individual concepts that are always in a process of reconstruction through socially available possibilities for self-hood. Therefore, the more academic writers' authorial voices and identities are fostered during their lives, the more they can project a valid and authoritative voice and identity in their texts. Accordingly, as Hyland (2002) viewed academic writing as an act of identity, by fostering authorial voice and identity in themselves, academic writers can go beyond the traditional view of maintaining content conveyance and represent a valid authorial persona by using available discoursal resources in academic contexts.

Viewing authorial identity as a measurable psychological construct, this study similar to Cheung et al. (2015) and Pittam et al. (2009) developed and validated a measure of authorial identity. In comparison to the previous models, i.e., SAQ and SABAS, which used a similar operational definition of authorial identity, the current model has been proposed based on a fundamentally strong but different theoretical framework. As two factors of SAQ map onto SABAS ('Confidence in writing' is similar to 'authorial confidence', and 'understanding authorship' is also related to 'identification with author'), due to using the same operational definition, the current model also includes confidence-related components. Since 'self as author' component in Ivanič's (1998) framework is mainly concerned with the extent to which writers have the confidence to signal their presence in the text, there is a harmonious relationship between authorial style, authorial voice, and identity, and other confidence related factors in previous models.

While the current model includes the authorial background component which is theoretically based on Ivanič's (1998) autobiographical self, previous models mostly ignored the effect of life experiences and possibilities for self-hood on shaping writers' authorial identities. Contrary to SAQ that included approaches to writing, and SABAS that included knowledge to avoid plagiarism, both of which are to some extent not key characteristics of authorial identity, the current model includes authorial persona and authorial style to touch on chief attributes of this psychological construct. Thus, the model can be considered as an alternative to the available measures in the literature including SAQ and SABAS.

It is hoped that a new model of authorial identity in a novel context can broaden the academicians' understandings of this construct, its main components, and the way it can affect the academic community. In the current study, multiple steps were taken to develop a model and a questionnaire of authorial identity and to overcome the limitations of the previous models. Primarily, the model was proposed based on homogeneous EFL graduate students in order to avoid fitting problems in future studies. Secondly, a systematic approach was used for item generation including qualitative data from consultation with academicians and scrutinizing the related literature. Thirdly, following Dörnyei (2010), rigorous steps were followed in developing and validating the authorial identity questionnaire.

CONCLUSION AND IMPLICATIONS

To conclude, although evidence for reliability and validity demonstrates that the model is much of a success compared to the previous models of authorial identity in the literature, we must acknowledge that it can be further refined and boosted by other researchers in the field. The current model has been proposed based on a homogeneous group of English students (TEFL and English Literature) as the target population for investigating authorial identity. Therefore, a multidisciplinary sampling in a different setting can make it generalizable to other disciplines. Finally,

although quantitative research has a plethora of advantages including objectivity, larger sample size, use of statistical rationalization, and more powerful generalizability (Dörnyei, 2007), we recommend that for further studies, the model and developed questionnaire be used in mixed-method studies together with qualitative techniques in order to gain an in-depth understanding of academic writers' authorial identities and authorial voices. For further research, the current measurement can be used in a comparative study to investigate the authorial identities of professional academic writers and those who are associated with plagiarism charges in various contexts. Furthermore, a qualitative study can also focus on supervisors being interviewed about their views on authorial identity model components. Such qualitative research can be of great help in collecting more evidence for redefining the authorial identity construct plus modifying the current model.

As Pittam et al. (2009) indicated, there is an inverse relationship between authorial identity and unintentional plagiarism in that the more the former is developed, the less the latter is likely to prevail. Furthermore, honor codes and interventions focusing on the citation, referencing and paraphrasing are mostly oversimplifying the complex issue of unintentional plagiarism. Hence, the current authorial identity model can be considered when designing academic writing courses in order to target the important factors that play a crucial role in developing academic writers' authorial identities. Consequently, an academic writing course will be more effective if the politics of writing (Clark & Ivanič, 1997), including authorial identity and authorial voice, be taught in conjunction with plagiarism prevention interventions. Accordingly, rather than traditional methods which had a posteriori approach to plagiarism prevention, the current study provides academicians with an a priori approach for lessening it. Using the current model of authorial identity, academicians can go beyond the traditional conventions of academic writing and train academic writers who have their unique authorial style to project their authorial persona, voice, and identity in their academic texts. Thus, a marked increase in the authorial identity level of university students and novice writers can lead to a major decline in the amount of unintentional plagiarism practiced at universities.

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