Development and Testing of Identity Fusion Instruments

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Abstract

The existence of complex dynamics in the behavior of individuals in groups can explain the theoretical constructs of individual and group relations that continue to develop today. One of the developed theoretical contracts is the theory of identity fusion. This study aims to compile an identity fusion scale based on Gomez, Swann, Vazquez, Brooks, Buhrmester, & Jetten's verbal identity fusion scale in 2011. There are several processes for compiling a measuring instrument in this study. First, by conducting an open-ended questionnaire to find behavioral indicators that emerged. The second is to test the content validity using Aiken's V content validity coefficient value. Third, to test the construct validity by doing Confirmatory Factor Analysis (CFA). Fourth is to test the validity of the criteria by correlating the scale of identity fusion and social identity. Finally, the researcher estimated the reliability of the final item compilation. The results showed that 27 items could use to measure verbal identity fusion, with a Cronbach alpha coefficient of 0.935. Based on the correlation results, there is a positive relationship between identity fusion and social identity. Although there are different perspectives in explaining individual behavior, the fusion of identity and social identity is a complementary and related construct.

Keywords

Article Info

INTRODUCTION

The behavior of individuals in groups may exhibit more complex characteristics, and dynamics mediate it within the group that can determine how individuals behave. The implications of individual psychological dynamics in groups are manifest by various events observed in the surrounding environment. Events such as brawls, riots with soccer fans, or extreme behavior can occur because of group influence. The influence that who can give to the group can explain the theoretical construct of individual and group relations, which continues to develop and become an exciting study.

Theoretical constructs explaining individual and group relations have developed over the years. The initial theory used to describe the dynamics of individuals and their social groups is the social identity theory proposed by Tajfel & Turner (1979; Gomez, Swann, Jetten, Whitehouse, & Bastian, 2012). Social identity theory is then related to several theoretical constructs derived from social identity theory—group identification and self-categorization (Gomez et al., 2012).

Group identification can be concluded as a process in which individuals perceive group members as an indistinguishable and interchangeable category. The implication is that collective bonds will bind group members based on the extent to which group members can represent the group's prototype as a whole (Swann, Gomez, Vazquez, Besta, Cui, Gonzales, Hornsey, et al.2014). Furthermore, self-categorization is a way to affiliate or seek reinforcement of the beliefs that exist in oneself according to the prototype that lives in groups that are considered to have a prominent influence on the individual (Seyle, 2003).2007). Referring to the theory of group identification and self-categorization, the theory of social identity was developed by Tajfel & Turner (1979; Gomez, Swann, Vazquez, Brooks, Buhrmester, & Jetten,2011). It can be seen that the main point is the emergence of uniform behavior between individuals and groups, which occurs because of the social identity that stands out in the individual.

The individual dynamics within the group do not stop there. Reich (2004; Swann et al. 2012) explains that there are situations when individuals do not always highlight their social identity. What happens is that the individual evaluates the social identity. For example, when a person thinks he can succeed by not following the group's way of thinking, the individual's identity will be more prominent, and the individual manifests behavior following his identity. This was further explained by Swann, Gomez, Huici, Goralez, Hixon (2010). Concerning the social identity theory described by Turner (1985; Swann et al.,2012), there is a negative correlation between personal and social identities. The more active the individual's social identity, the less active the individual's identity is. The implication is that individuals may leave their group identity due to the evaluation carried out by the individual and choose to behave following the personal values he believes in without any influence from the group.

Characteristics of individual behavior in social identity show boundaries between the personal self and the social self. To that end, Gomez et al. (2012) then revised the theoretical assumptions on the concept of social identity. According to him, the apparent gap between self and group identity in social identity theory has not explained the reasons for extreme actions carried out by groups, such as terrorism, mass murder, and so on. One of the theoretical constructs that later developed to fill the gap was the theory of identity fusion. Swann, Gomez, Seyle, Morales, & Huici (2009) introduced the identity fusion theory, which refers to the principle of attachment between individuals (attachment in a close

relationship). According to Swann & Buhrmester (2015), identity fusion is defined as a deep feeling of unity between the group and group members. Identity fusion develops to reconstruct the theory of social identity, which explains that there is still a distance between individual identity and social identity. Gomez et al. (2012) explain that most people experience clear boundaries between their personal and social selves. Meanwhile, for people who feel very united with the group (fused person), the boundaries between themselves and the group can be penetrated.

By developing its theoretical constructs, the theory of identity fusion has almost the same concept as other theories in explaining individual behavior but also has specific differences. According to Swann et al. (2012), in in-group identification, individuals tend to see from the group's perspective, not from personal relationships between group members. The behavior is raised to group members is determined by how much group members embody the characteristics of the group—not based on the quality of relationships between individuals in the group. In comparison, individuals who fuse have deep feelings for group members. The fused individuals see themselves through the group members, and in addition, they also perceive the group through themselves. The effect of this assessment encourages strong feelings of connectedness in the group.

A fused identity in the individual is assumed to explain extreme behavior carried out in groups. In addition, it is also able to explain why someone wants to donate personal property or is also willing to sacrifice more for the sake of group members (Swann et al.,2012). This is explained in Newson, Buhrmester, and Whitehouse's (2016) research that fusion causes a lasting feeling of loyalty to a group.

The development of identity fusion theory measurement was carried out by Swann et al. (2009) based on the theory used to measure attachment in close relationships developed by Aron, Aron & Smollan,1992; Swann et al.,2009). The Other in Self (IOS) scale was modified by Swann et al. (2009) to measure the fusion of individual identities by presenting a scale in the form of five images that represent different levels in describing the relationship between self and others. However, this scale model does not describe the fused perspective in-depth, so a verbal scale of identity fusion was developed by Swann, Gomez, Buhrmester, Vazquez, Jetten (2011) concerning two aspects of fusion, namely perception of connectedness and reciprocal strength.

Along with the development of verbal measuring tools, Gomez et al. (2011) stated that the constructed identity fusion verbal scale was limited to Spanish and American populations. There is a tendency for different relational ties in other countries, especially collectivistic countries such as Asia. The assumption that there are different forms of social relations in the collectivist country is the basis for researchers to make a verbal scale for identity fusion in the context of Indonesia. Furthermore, this study will also compare the identity fusion scale made with the social identity scale because, as previously explained, identity fusion is a reconstruction of social identity theory.

METHOD

Research design

The construction of this identity fusion scale is carried out through several stages. The preparation of this scale goes through the stages of determining the concept, writing items, and testing the validity and reliability. Before testing the validity, the researcher conducted

an item-total correlation analysis to obtain items with high discriminatory power and measure the desired construct. The reliability test will be carried out with Alfa Cronbach's internal consistency reliability. While the validity test carried out is construct validity with confirmatory factor analysis and criterion validity. After obtaining valid and reliable items, the last stage is the final formulation of these items into an identity fusion scale.

Concept Determination

The theoretical construct used is the theory of identity fusion developed by Swann et al. 2009). Swann et al. (2011) explain that two aspects characterize the fusion of individuals into groups, namely perception of connectedness and reciprocal strength. Perception of connectedness is characterized by feeling attached or feeling a sense of belonging to a group. One characteristic that emerges is that individuals feel they have something in common with their group. Reciprocal strength is the perception that group members make the group strong and make those members strong.

To reveal behavioral indicators based on predetermined theoretical constructs, the researchers then distributed open-ended questionnaires to 45 subjects. Subject selection is based on local fusion theory, namely individuals who build relationships through personal contact and share experiences directly. Therefore, the respondents in this study are students who are members of specific communities or social groups. Three questions were asked, namely 1) "Describe in detail your experiences and feelings towards the group? Explain in detail" 2) "In your opinion, how was your experience in your interactions with group members? explain in detail" 3) "In your opinion, how was the group experience for you? explain in detail."

After conducting the coding process and categorizing the results of the open-ended questionnaire, indicators were found, which were then operationalized into items. The item formulation is then summarized in the initial blueprint described in table 1.

Table 1. Initial Blueprint of Identity Confusion

No	Aspect	Indicator	Item	Weight
1.	*Perception of connectedness*	There are similarities between self and group	1, 2, 3, 4, 5, 6, 7, 8	20%
		Groups provide comfort	9, 10, 11, 12, 13, 14, 15, 16	20%
		Feeling emotionally close to group members	17, 18, 19, 20, 21, 22, 23, 24	20%
2.	*Reciprocal strength*	The group becomes a means of change for yourself	25, 26, 27, 28, 29, 30, 31, 32, 33	20%
		Provide mutual support and assistance	34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45	20%
				100%

Research subject

The researcher evaluates the grammatical accuracy of the items in describing the psychological constructs as measured by asking 2-3 Psychology Masters students to review the items. The item relevance test was carried out by 25 UGM Psychology Masters students who acted as raters. Furthermore, to test the discriminatory power of the items that have been made, the researcher then distributed questionnaires to 60 UGM psychology students. The last stage is factor analysis, test reliability, and construct validity involving 157 respondents. Respondents in the last stage consisted of undergraduate and postgraduate students from various faculties and universities in Indonesia. Respondents were aged between 18 to 27 years. The sampling technique used was non-random sampling (accidental sampling).

Research Instruments

There are two instruments used in this study. The first is the identity fusion scale developed by the researcher. The second is the social identity scale developed by Pattinama (2010). Pattinama (2010) adapted the scale compiled by Nuraeni (2005) based on the group cohesiveness questionnaire of Martens, Landers, and Loy (1972, in Pattinama,2010) and the group attachment of Yukelson, Weinberg, and Jackson (1984, in Pattinama,2010). The social identity style is used as an instrument to test the validity of the criteria.

RESULT
Aiken Content Validity

The content validity test used in this study refers to Aiken's V's content validity coefficient value, which is based on the assessment results of 25 Psychology Master's students who act as raters. With the number of raters as many as 25 people and five rating categories, the minimum value of the V index set is 0.63 (Aiken,1985). Based on the results of the calculation of the V index of the identity fusion scale, the range of scores obtained ranged from 0.67-0.88. Thus, all items in the scale are declared valid and can be tested quantitatively on several respondents.

Discriminant Power and Reliability

Item-total correlation analysis and reliability with internal consistency were performed on 60 respondents. Meanwhile, the minimum item-total correlation value set in this study was 0.4. It is based on the statements events (1992, in Azwar,2012), which recommends that items with a loading factor above 0.4 are worth keeping. Meanwhile, the reliability coefficient value must reach 0.8 (Azwar,2012).

Based on the power of discrimination results, the researcher found three items with a value of *corrected item-total correlation* below 0.4 and was declared invalid. The items are item 1, item 11, and item 26, so the number of items remaining is 42 items. After the three items were discarded, the total item correlation value ranged from 0.51 to 0.77, with an Alpha reliability value of 0.954. Thus this scale can be considered satisfactory.

Factor Analysis

Factor analysis was carried out with 157 respondents and was carried out with the help of the SPSS program. Factor analysis was carried out to see whether the distribution of items

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was following the blueprint already arranged. The calculation results show that the Bartlett Test of Sphericity value is 4.0373 with $p<0.01$, which means there is a significant correlation between variables. The results of the Kaiser-Meyer-Olkin (KMO) calculation of 0.905 indicate that the sample in this study is sufficient.

The next step in factor analysis is factor rotation to maximize the grouping of variables. Based on the results of the factor rotation, it was found that two items did not appear in the two factors, namely item 1 and item 31. Apart from the two items that did not appear, several items appeared in different groups from those specified in the blueprint. For this reason, groups of items that appear on factors that do not match the blueprint are aborted. A total of 15 items were dropped, leaving 27 identity fusion items. The distribution of the Loading Factor of each item on the measured dimensions can be seen in Table 2. This shows that the distribution of items and the separation of aspects are well distributed following the theory and blueprints prepared.

After the factor analysis was carried out, the reliability test was again carried out on 157 subjects by excluding the 15 items that were previously aborted. The result of the Alpha reliability coefficient is 0.930. The coefficient values obtained indicate that the identity fusion scale is reliable, and the measurement results can be trusted.

Table 2. Rotation Factors of the Identity Fusion Scale

Items	Factor 1	Factor 2
PC2	.581	
PC3	.724	
PC4	.764	
PC5	.592	
PC10	.422	
PC12	.640	
PC13	.559	
PC14	.621	
RS15		.489
RS16		.566
PC18	.518	.434
PC21	.514	
PC22	.623	
RS23		.537
RS24		.706
RS25		.443
PC28	.529	
PC29	.568	
PC30	.537	
RS32		.645
RS33		.509
RS34		.459
PC37	.718	
PC38	.705	
RS39		.660
PC41	.821	
PC42	.708	
Explained variance	14.538	2,444
Variance in %	34,614	5,818
Cumulative Variance in %	34,614	40,432

Criteria Validity

The criterion validity test correlated the identity fusion scale with the social identity scale. In developing theory, social identity and identity fusion become a series of constructs that explain the phenomenon of individual and group behavior. Social identity explains that individual behavior depends on which self-identity is highlighted by the individual. Meanwhile, identity fusion states that under certain conditions, the identities of individuals and groups can merge into one identity. Based on the similarities in explaining individual and group identities, the researcher finally chose the social identity scale compared with the identity fusion scale. The results of the product-moment correlation test are presented in Table 3.

Table 3. Correlation Results of Identity Dissolution Scale and Social Identity

		Identity Fusion	Social Identity
Identity Fusion	Pearson Correlation	1	.570**
	Sig. (2-tailed)		.000
	N	157	157
Social Identity	Pearson Correlation	.570**	1
	Sig. (2-tailed)	.000	
	N	157	157

** The correlation is significant at the level of $p<0.01$

Based on the results of the product-moment correlation analysis, it was found that the identity fusion scale was significantly positively correlated ($p < 0.01$) with the social identity scale. The correlation value ($r=0.570$) indicates a relatively strong correlation between the identity fusion scale and the social identity scale used. These findings confirm several previous findings regarding the conceptual relationship between identity fusion and social identity.

DISCUSSION

This study aims to develop an identity fusion scale and test the scale. In general, the developed scale has good psychometric characteristics. The identity fusion scale has an Alpha reliability coefficient of 0.905. The reliability value is proven to be above the established reliability coefficient standard, which is above 0.8 (Azwar,2012). The results of the discriminant power analysis are also in a suitable category; namely, 45 items are known to have an item-total correlation value above 0.4 so that no item is dropped.

The subsequent psychometric analysis is factor analysis. Based on the confirmatory factor analysis with two factors, it was found that 15 items fell out. Item 1 and item 31 do not appear on either factor. Item 1 reads, "The group and I have the same interests," while item 31 reads, "I and group members can understand each other's feelings." Meanwhile, 13 other items are known to appear on different factors from the theoretical concepts in the blueprint. The number of items that do not appear or fall into different factors is assumed to occur because of the similarity. Swann et al. (2009) suggest that this can happen because the two aspects of identity fusion are unidimensional. According to Widhiarso (2010), unidimensional means a similarity in the measuring domain because the measuring domain is single. It can be explained further that the two aspects of identity fusion, namely

perception of connectedness and reciprocal strength, are two things that go hand in hand in describing the identity fusion construct itself. This causes a tendency to relate in explaining the first and second aspects.

Eight items fell out in the first aspect, namely the perception of connectedness. The items that fail the most are in the first indicator, namely the similarity between themselves and the group. Based on his conceptual understanding, the trustworthy fused individual no longer considers the similarities between self and group. Furthermore, they have been able to integrate their personal and social self into the group as a whole. The similarity of self with the group is then manifested by a feeling of unity between each group member (Swann et al.,2014). The implication is that when in certain extreme conditions, the fused individual will be motivated to take pro-group actions without knowing the reason for the behavior (Gomez et al., 2010).2011). An assertion that individuals will automatically perform pro-group actions without any evaluation-benefit action or comparison of self and group (Heger & Gaetner,2018). The number of items that fall in the first indicator strengthens the theoretical assumption that explains the perception of connectedness aspect in the theory of identity fusion. However, even though the first indicator leaves one item, the similarity between self and group is an indicator that still needs to be maintained in explaining the perception of the connectedness aspect. The similarity between self and group is assumed to complement the other two indicators; the group provides comfort and feels emotionally close.

The second aspect is reciprocal strength; seven items fall out of 17 items. The highest factor loading values are found in three items, namely items number 24, 32, and 39. All three are in the group indicator as a means of change for themselves. Item 24 reads, "Group members change my mindset." Item 32 reads, "I became a different person because of the influence of group members." Item 39 reads, "I feel the group influences my life principles." According to Gomez et al. (2012), individuals who fuse with the group perceive that group members make the group strong, and the group makes these members strong. Through the open-ended results, two indicators emerged in this aspect: the group being a means of change for the individual and providing mutual support and assistance. The factor analysis results left ten items, with seven items being dropped.

Welcome as in the first aspect; in the second aspect, all seven items were dropped because the items appeared in different aspects from those described in the blueprint. Based on Widhiarso's (2010) statement regarding the unidimensional concept, it can be seen that both aspects are in a single domain. The existence of a relationship between the two aspects can happen. The implication that can arise is the occurrence of overload, which is shown in the factor analysis results. In addition, the potential for overload on items can be even more significant because the statements in items that explain the meaning are almost the same as the meanings in other items.

To strengthen the accuracy of the constructed measuring instrument in revealing identity fusion, the next researcher compares using a social identity scale. The correlation results show a positive relationship between identity fusion and social identity. Through developing his theoretical construct, Swann et al. (2011) explain that the theory of identity fusion integrates a revision of the previous theory. This integration provides a new way of looking at the relationship between individuals and groups. In particular, fusion reconstructs the gap between social identity and personal identity in social identity theory which explains the categorization of individuals. Swann et al. (2012) explain that the relationship between

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individual and group identities can be in a permeable condition so that individuals and groups can merge into a single unit.

Furthermore, Social identity theory describes the relationship between individuals and groups, while identity fusion describes individuals and groups and their group members. Tajfel & Turner (Swann & Buhrnmester,2015) explains that the individual shows a positive response to the group when he evaluates the group positively. The same thing also affects the individual level; when individuals in a group evaluate their group members positively, it will affect their relationship with them. Although there are different perspectives in explaining objects, identity fusion and social identity are complementary and interrelated constructs.

CONCLUSION

This research produces an identity fusion measurement tool that can determine the description of the fusion of individuals to their social groups, especially in Indonesia's relations. In the preparation process, several study limitations can improve further research. First, this research only focuses on the verbal identity fusion scale. Gomez et al. (2011) previously made a pictorial identity fusion measurement tool; including a pictorial scale in measuring fusion in individuals is essential to know a more comprehensive picture of fusion. Second, the items in this study are favorable. Further research is necessary to add unfavorable items to see the consistency that describes fusion in individuals. Third, many fusion and social identity items overlap when a CFA analysis combines identity fusion and social identity factors. The study of Gomez et al. (2011) stated a difference between identity fusion and group identification from the results of the CFA analysis carried out. Although, in theory, social identity and identity fusion are different constructs, the results of this study indicate that there is still a connection between the two psychological constructs. The overlap of items in this study can also be influenced because the statements in item identity fusion tend to be similar to items in social identity. For this reason, it is necessary to include a pictorial scale along with a verbal scale to minimize the overlap of items on the verbal fusion scale.

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