

Flow in Consumer Research: A Novel Approach

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EXTENDED ABSTRACT

Since the seminal article by Hoffman and Novak (1996) flow has gained more attention in consumer research. Reviewing the literature, there have been several attempts to develop a conceptualization of flow, whereby the following characteristics seem to make up the core of the construct: action-awareness merging (1), loss of self-consciousness (2), transformation of time (3), sense of control (4), clear goals (5), unambiguous and seamless feedback (6), challenge-skill balance (7), concentration on task at hand (8), and autotelic experience (9).

However, our examination shows disparity between the different conceptualizations. First, there is no overall agreement on the use of the flow characteristics. Some researchers (Chen, Wigand, and Nilan 2000; Jackson and Eklund 2002; Stavrou et al. 2007) take all of the above mentioned characteristics into consideration. Alternatively, others confine themselves to selected characteristics and/or use additional ones (Huang 2006; Novak, Hoffman, and Yung 2000; Shin 2006). Second, there is often no discussion whether these characteristics are formative or reflective dimensions, or even if they might be seen as antecedents or consequences of flow. Only a few researchers (Drengner, Gaus, and Jahn 2008; Sánchez-Franco 2006; Sánchez-Franco and Roldán 2005; Shin 2006; Siekpe 2005) discuss the nature of the dimensions (reflective vs. formative) intentionally.

Generally, both problems seem to be based on the fact that flow has often been defined with special focus on the respective subject of investigation. Therefore, we develop a new and universal conceptualization and test it empirically.

With the help of some decision rules by Jarvis, MacKenzie, and Podsakoff (2003), we classified the characteristics 1 to 4 and 8 as reflective dimensions and the characteristics 5 to 7 as antecedents. Since it is neither an antecedent nor a formative dimension or a manifestation of flow, we see characteristic 9 rather as a consequence of the flow experience. Hence, we excluded this characteristic from our 3 empirical studies.

In study 1, subjects were 618 online-game players (81 female, 537 male; 23.0 mean age). Study 2 contained 1,556 soccer World Cup viewers (742 female, 854 male; 25.7 mean age). The sample of study 3 consisted of 120 attendees of soccer World Cup public viewing points (48 female, 72 male; 23.6 mean age). We assessed the antecedents and dimensions, each with 3 items following the Flow Scales by Jackson and Eklund (2002).

In all three studies, there was no differentiation between respondents who experienced flow and those who did not with respect to their perceived control. These findings can be corroborated by the theory of planned behavior (Ajzen 1991), stating that perceived control is a precondition for behavioral intention and behavior. Following this idea, control would lead to the behavior, which might result in a flow experience. Hence, we exclude characteristic 4 from further analyses.

The remaining characteristics were evaluated by two different second-order models in study 1 with the help of CFA. Model 1, which draws upon the mostly used perspective (e.g., Chen et al. 2000; Csikszentmihalyi 1975; Jackson and Eklund 2002; Stavrou et al. 2007), incorporates all characteristics (1 to 3, 5 to 8) as dimensions. Model 2 distinguishes the characteristics between dimensions (1 to 3, 8) and antecedents (5 to 7) of flow according to

our suggested conceptualization. The fit values (χ^2 , RMSEA, SRMR, NNFI, CFI, PNFI, CVI), the loadings of the characteristics as well as their explained variance attest superiority to model 2.

Given the need for generalizability we retested model 2 in study 2 and 3 with different subjects of investigation. Again, the empirical findings support our conceptualization with 4 reflective dimensions (1 to 3, 8). Therefore, we suggest the following flow definition: Flow is a holistic experience, explaining the state in which the acting individual experiences a loss of self-consciousness, loses all sense of time while being highly concentrated and having the impression of his or her consciousness and action merging. This definition provides first directions towards a universal conceptualization of flow, which is applicable in various fields of consumer research.

REFERENCES

- Ajzen, Icek (1991), "The Theory of Planned Behavior," *Organizational Behavior and Human Decision Processes*, 50 (2), 179–211.
- Chen, Hsiang, Rolf T. Wigand, and Michael S. Nilan (2000), "Exploring Web Users' Optimal Flow Experiences," *Information Technology & People*, 13 (4), 263–81.
- Csikszentmihalyi, Mihaly (1975), *Beyond Boredom and Anxiety*. San Francisco: Jossey-Bass.
- Drengner, Jan, Hansjoerg Gaus, and Steffen Jahn (2008), "Does Flow Influence the Brand Image in Event Marketing?," *Journal of Advertising Research*, 48 (1), 138–47.
- Hoffman, Donna L. and Thomas P. Novak (1996), "Marketing in Hypermedia Computer-Mediated Environments: Conceptual Foundations," *Journal of Marketing*, 60 (3), 50–68.
- Huang, Ming-Hui (2006), "Flow, Enduring, and Situational Involvement in the Web Environment: A Tripartite Second-Order Examination," *Psychology & Marketing*, 23 (5), 383–411.
- Jarvis, Cheryl B., Scott B. MacKenzie, and Philip M. Podsakoff (2003), "A Critical Review of Construct Indicators and Measurement Model Misspecification in Marketing and Consumer Research," *Journal of Consumer Research*, 30 (September), 199–218.
- Jackson, Susan and Robert C. Eklund (2002), "Assessing Flow in Physical Activity: The Flow State Scale-2 and Dispositional Flow Scale-2," *Journal of Sport & Exercise Psychology*, 24 (2), 133–50.
- Novak, Thomas P., Donna L. Hoffman, and Yiu-Fai Yung (2000), "Measuring the Customer Experience in Online Methodological Environments: A Structural Modeling Approach," *Marketing Science*, 19 (1), 22–42.
- Sánchez-Franco, Manuel J. (2006), "Exploring the Influence of Gender on the Web Usage via Partial Least Squares," *Behaviour & Information Technology*, 25 (1), 19–36.
- _____ and José L. Roldán (2005), "Web Acceptance and Usage Model—A Comparison between Goal-directed and Experiential Web Users," *Internet Research*, 15 (1), 21–48.
- Shin, Namin (2006), "Online Learner's 'Flow' Experience: An Empirical Study," *British Journal of Educational Technology*, 37 (5), 705–20.

- Siekpe, Jeffrey S. (2005), "An Examination of the Multidimensionality of Flow Construct in a Computer-Mediated Environment," *Journal of Electronic Commerce Research*, 6 (1), 31-43.
- Stavrou, Nektarios A., Susan A. Jackson, Yannis Zervas, and Konstantinos Karteroliotis (2007), "Flow Experience and Athletes' Performance with Reference to the Orthogonal Model of Flow," *The Sport Psychologist*, 21 (4), 438-57.