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ANÁLISIS DE DATOS CUALITATIVOS

5/20/22

Referencias:

- Research Methods in Human-Computer Interaction. Lazar, Feng and Hochheiser – capítulo 14

TECNOLOGÍA PARA COVID



<https://innovations.stanford.edu/wearables>

TECNOLOGÍA PARA COVID

The Hot New Covid Tech Is Wearable and Constantly Tracks You

Sports leagues, large employers and colleges are turning to devices that could usher in more invasive forms of surveillance.

<https://www.nytimes.com/2020/11/15/technology/virus-wearable-tracker-privacy.html>

In Rochester, Mich., Oakland University is preparing to hand out wearable devices to students that log skin temperature once a minute — or more than 1,400 times per day — in the hopes of pinpointing early signs of the coronavirus.

In Plano, Texas, employees at the headquarters of Rent-A-Center recently started wearing proximity detectors that log their close contacts with one another and can be used to alert them to possible virus exposure.

And in Knoxville, students on the University of Tennessee football team tuck proximity trackers under their shoulder pads during games — allowing the team's medical director to trace which players may have spent more than 15 minutes near a teammate or an opposing player.

ENTREVISTA SEMI ESTRUCTURADA

¿Cuáles sitios de música visitas más frecuentemente?

Por qué?

Cuéntame sobre el diseño del sitio

Algo más que te guste sobre el sitio?

Algunas otras razones para visitar el sitio, que no hayas mencionado antes?

ESCRIBAMOS PREGUNTAS

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<https://forms.gle/Rm2spj947FkvXBeP8>

ANTES DE EMPEZAR...

5 minutos = Plazo: este miércoles a las 8pm



: 2 puntos de la Tarea 3. 😊

https://docs.google.com/forms/d/e/1FAIpQLSdGtsEc_m2jyolmEJhJcem1Qs-lvyGF_vWh5otN1x60SBfQ0Q/viewform?usp=sf_link

ESTE VIERNES

Traer computador c/conexión a internet

* Zapatillas

DATOS CUALITATIVOS

Vienen de...

Entrevistas
Focus Groups
Observación
Preguntas abiertas
cuestionarios
Diarios
etc etc

Obtendremos

Notas de campo
Texto (transcripciones)
Audio
Fotos
Video

¿Como analizamos?

Métodos de análisis
cualitativos

CÓMO HACER ANÁLISIS

Qualitative data: messy, complicated, open to interpretation [DTMBR 2018]

1. Transcribir 🤖
2. Elegir técnica de codificación y análisis
 1. Usar (o no) apoyo de la tecnología

[Lucero 2015]

ANÁLISIS TEMÁTICO

Establecer **temas**: palabras o frases cortas que asignan un atributo que captura la esencia, sumativa, de algo.

Ejemplo:

“el precio del reloj es demasiado alto para lo que yo puedo pagar” **sensible a costos**

“si el reloj fuera más económico, le compraría uno a mi nieto” **sensible a costos**

“tuve uno porque me lo regalaron, pero cuando se me cayó no me dio tiempo de volver a comprar otro ” **sensible a costos**

[DTMBR 2018]

ANÁLISIS TEMÁTICO

En general se usa para análisis bottom-up, pero también podría ser top down.

[DTMBR 2018]

TEORÍA FUNDADA, TEORÍA FUNDAMENTADA, O GROUNDED THEORY

Es una manera de desarrollar teorías basadas (grounded) en datos.

Incluye MUCHOS “sabores” de GT

So what is new? Especialmente si hacemos la revisión de literatura
DESPUÉS

TEORÍA FUNDADA, TEORÍA FUNDAMENTADA, O GROUNDED THEORY

- Simultaneous involvement in data collection and analysis;
 - Developing analytic codes and categories “bottom up” from the data, rather than from preconceived hypotheses;
 - Constructing mid-range theories of behaviour and processes;
 - Creating analytic notes, or memos, to explain categories;
 - Constantly comparing data with data, data with concept, and concept with concept;
 - Theoretical sampling – that is, recruiting participants to help with theory construction by checking and refining conceptual categories, not for representativeness of a given population;
 - Delaying literature review until after forming the analysis.
- (Charmaz 2008)

CODIFICACIÓN

Código: asignar atributo sumativo/evocative a una parte de los datos cualitativos

Buscar

- Patrones
- Similitudes
- Relaciones

Exploratory coding = dejar que el texto me d

Ojo: igual

Depende de interpretación

Coding c/pregunta de investigación= no considerar datos que no nos interesan/pre-definir códigos (ya sé lo que me interesa!)

https://www.youtube.com/watch?v=BAKRKZq_Ebo

CUÁL ES NUESTRO OBJETIVO

Códificación inductiva

- Se revisan los textos una y otra vez hasta que se construya una teoría... GROUNDED THEORY (teoría fundamentada)

Ojo: igual

Depende de interpretación

Codificación deductive

- Ya sabemos la teoría, solo necesitamos la respuesta a nuestra pregunta

https://www.youtube.com/watch?v=BAKRKZq_Ebo

CÓMO CODIFICAR

Codificación abierta: Leemos los datos varias veces y creamos códigos para resumir lo que está pasando (basado solo en lo que vemos en los datos)

Codificación axial: Identificar relaciones entre las codificaciones abiertas (¿cuáles van juntas?)

Codificación selectiva: Encontrar la variable central que incluye todos los datos. Luego Volver a leer datos y codificar todo lo que tiene que ver con la variable central,

<https://prpost.wordpress.com/2013/07/22/an-example-of-how-to-perform-open-coding-axial-coding-and-selective-coding/>

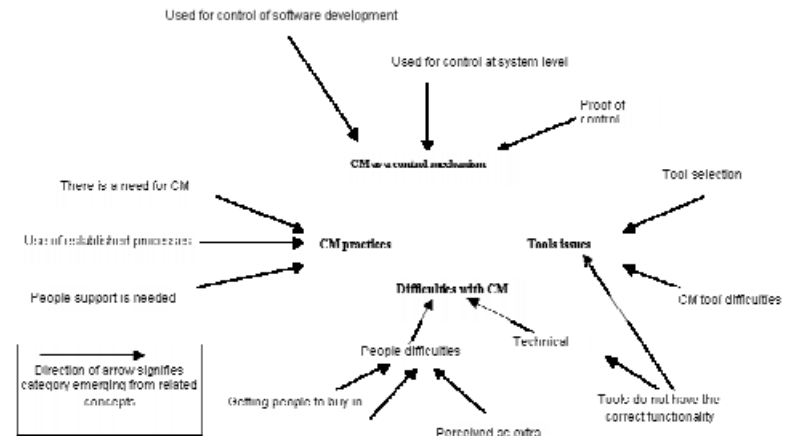
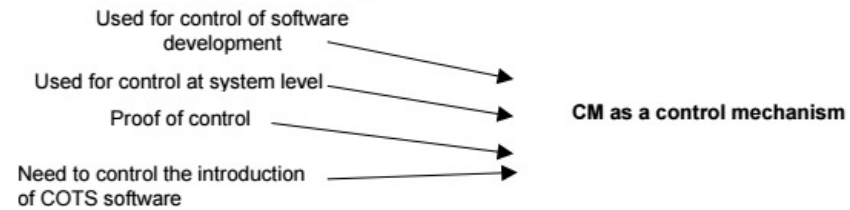
ANÁLISIS (EJEMPLO DE ALLEN, 2003)

| Interview Text | Codes |
|---|--|
| From my perspective | Personal view |
| the main challenge is | Assertion |
| in changes in technology | Changes in technology |
| or the product improvement | Changes in product |
| done by the COTS supplier. | Assertion Changes by Supplier |
| You | Pronoun shift |
| can never guarantee that | Assertion Uncertainty |
| if you are buying several, | Procurement |
| they will all be the same. | Product consistency Necessary condition |
| Yes, | Affirmation |
| when you come to buying PCs | Procurement of hardware |
| a lot of our products now are delivered with the software already loaded on the PCs | Integrated products Hardware Software |
| that causes you to go through an inspection. | Extra work Costs in human effort Costs in time |
| We weren't happy, | Dissatisfaction |
| it was costing us extra money. | Costs in money |
| Last year this part of Company Y organised a forum workshop seminar on COTS, | Extra work Action due to COTS shortfall |
| and as part of that we did a survey of a number of our projects on problems and issues with using COTS | Extra work Implementation difficulty |
| the short time that components become obsolete. | Short time to obsolescence |

| Id | Key Point | Code |
|-------------------|--|---|
| P _{x1} | Manual standards on CM were set up as a result of a Requirements Study for better control of in-house software development. | control of software software development |
| P _{x2} | Company X required a CM system at minimum cost. | requirement for a CM system |
| P _{x2a} | Maestro II was selected as CM tool | CM tool |
| P _{x3} | End-to-end CM is defined as the full life-cycle from conception stage through to and including operational maintenance. | CM system |
| P _{x4} | Scheduling changes was regarded as an essential and integral part of the software process. | changes software process |
| P _{x5} | CM Projects Department has been officially formed. | recognition of CM |
| P _{x5a} | All future work will mandate CM on all data streams. | recognition of CM support for CM |
| P _{x6} | Processes equate to Configuration identification and configuration control. | CM process |
| P _{x7} | CM audits are used to bring other software systems under CM control. | CM process |
| P _{x8} | Status Accounting is used to report monthly to the Project Board. | CM process |
| P _{x9} | Main difficulty is getting people to buy-in to CM. | people difficulty |
| P _{x10} | 3 rd parties have a preconceived set of established tools and are not willing to see the in-house point of view. | people difficulty tool difficulty |
| P _{x11} | Developers saw CM as a control mechanism rather than a helpful tool. | not helpful control people difficulty |
| P _{x12} | People in the rapid application development (RAD) team thought that CM slows down their work and perceived CM as "just another layer of administration". | slows down work administration resistance to CM |
| P _{x13} | Involving software developers in the CM set-up processes can solve problems with the perception of CM. | people issue |
| P _{x13a} | CM perception problems can be solved by involving people in discussions | people issue |
| P _{x22} | Software is controlled in pre-production and production using CM. | control of software |
| P _{x27} | Company X had a need to develop a version control system for software. [Comment: This implies that there is not one available on the open market] | tool difficulty software version control |

Table 3 : Emergence of concepts from the codes in Case Study X data

| |
|---|
| Used for control of software development – P _x 1, P _x 4, P _x 11, P _x 22, P _x 27 |
| Perceived as extra work – P _x 12, P _x 13, P _x 13a |
| Recognised need for a CM system – P _x 2, P _x 3 |
| CM recognised by company – P _x 5, P _x 5a, P _x 17, P _x 19, P _x 23, P _x 24, P _x 29 |
| Use of established CM processes – P _x 6, P _x 7, P _x 8, P _x 30 |
| Difficult to get people to buy-in – P _x 9, P _x 10 |
| Tools do not have the correct functionality – P _x 10 |
| CM active seen as part of other activities – P _x 15, P _x 16, P _x 26, P _x 30, P _x 31, P _x 33, P _x 34 |
| Used for control at system level – P _x 4, P _x 11, P _x 18, P _x 20, P _x 23, P _x 24, P _x 27, P _x 32, P _x 35 |
| People support is needed – P _x 9, P _x 25, P _x 29 |
| People are reluctant to practise CM – P _x 11, P _x 28 |
| CM tool difficulties – P _x 10, P _x 27 |
| Proof of control – P _x 33, P _x 34, P _x 34a |



CODIFICACIÓN Y TRIANGULACIÓN

9: como tuve este problema respiratorio, y adonde yo vivo en Talca, el ambiente en invierno es muy tóxico... Él me va a dejar. Me lleva esa cuadra. Llego, y me preparo mi oncesita... armo mi bandeja inmediatamente y me voy al computador un rato... Me siento de nuevo en mi sillita, tejo otro ratito y la camita la agarro como a las nueve y media más o menos... No me acuesto durante todo el día. Yo estoy todo el día en actividad.

| |
|-----------------------|
| Si_poder_tareas_hogar |
| Mantenerse_activo |

9: como tuve este problema respiratorio, y adonde yo vivo en Talca, el ambiente en invierno es muy tóxico... Él me va a dejar. Me lleva esa cuadra. Llego, y me preparo mi oncesita... armo mi bandeja inmediatamente y me voy al computador un rato... Me siento de nuevo en mi sillita, tejo otro ratito y la camita la agarro como a las nueve y media más o menos... No me acuesto durante todo el día. Yo estoy todo el día en actividad.

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| Mantenerse_activo |
| Si_poder_tareas_hogar |

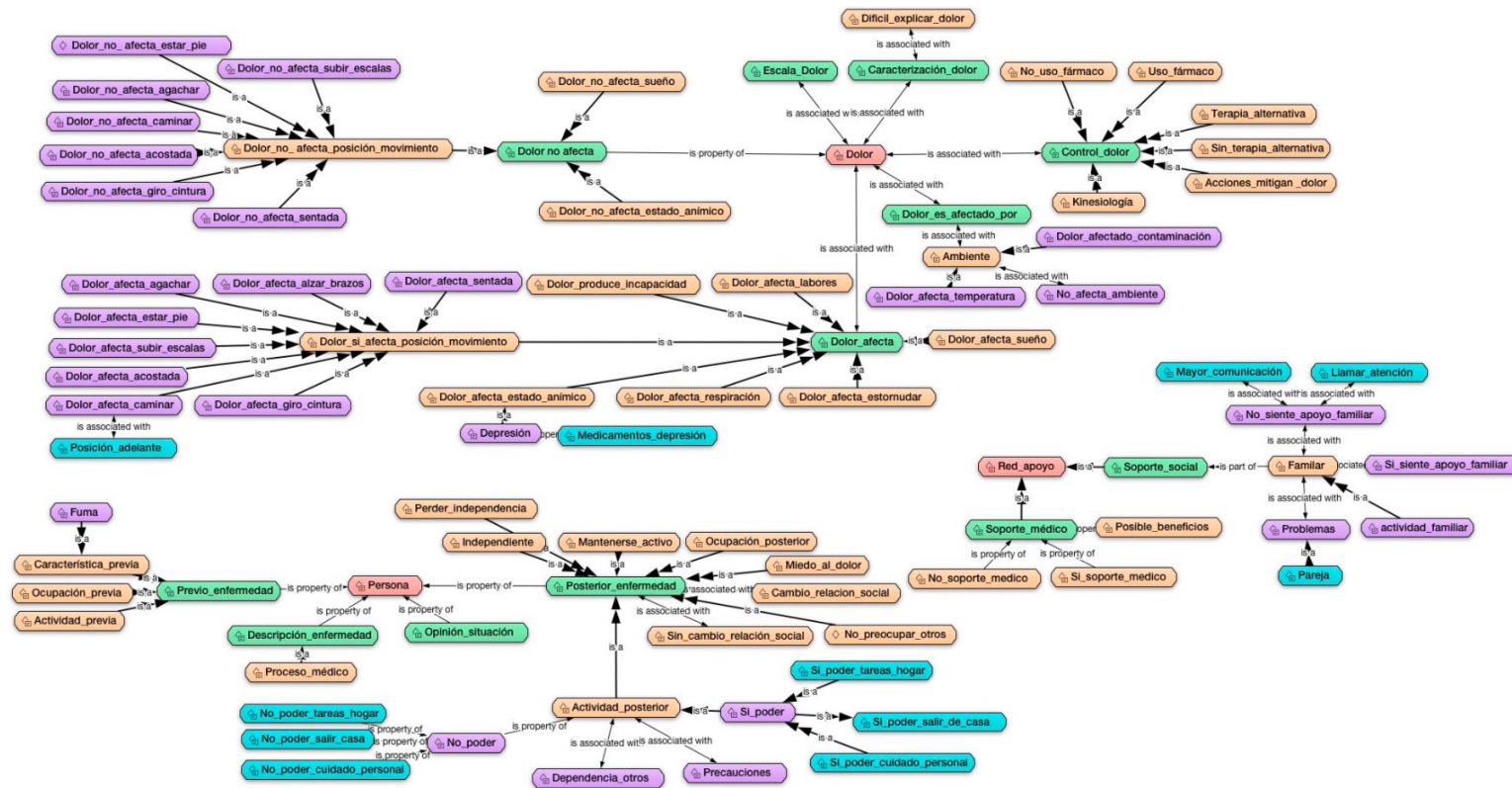
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| |
|-----------------------|
| Si_poder_tareas_hogar |
| Mantenerse_activo |

[Iyubanit Rodríguez]

CÓDIGOS INICIALES Y CODIFICACIÓN AXIAL

| | |
|--------------------------------------|----|
| \Dolor | 1 |
| \Dolor no afecta | 0 |
| \Dolor_afecta | 3 |
| \Dolor_afecta_acostada | 7 |
| \Dolor_afecta_agachar | 3 |
| \Dolor_afecta_alzar_brazos | 3 |
| \Dolor_afecta_caminar | 20 |
| \Dolor_afecta_estado_anímico | 11 |
| \Dolor_afecta_estar_pie | 16 |
| \Dolor_afecta_estornudar | 1 |
| \Dolor_afecta_giro_cintura | 5 |
| \Dolor_afecta_labores | 2 |
| \Dolor_afecta_respiración | 1 |
| \Dolor_afecta_sentada | 3 |
| \Dolor_afecta_subir_escalas | 5 |
| \Dolor_afecta_sueño | 8 |
| \Dolor_afecta_temperatura | 7 |
| \Dolor_afectado_contaminación | 2 |
| \Dolor_es_afectado_por | 0 |
| > Dolor_no_afecta_estar_pie | 1 |
| \Dolor_no_afecta_posición_movimiento | 3 |
| \Dolor_no_afecta_acostada | 3 |
| \Dolor_no_afecta_agachar | 4 |
| \Dolor_no_afecta_caminar | 2 |
| \Dolor_no_afecta_estado_anímico | 2 |
| \Dolor_no_afecta_giro_cintura | 1 |
| \Dolor_no_afecta_sentada | 7 |
| \Dolor_no_afecta_subir_escalas | 2 |
| \Dolor_no_afecta_sueño | 5 |
| \Dolor_produce_incapacidad | 4 |





Coding Comparison Query Criteria

Search in: **All Sources** **Selected Items** **Selected Folders or Sources**

Coded At: **Selected Nodes** Natural environment...energy,Water

User Group A: Henry Patterson

User Group B: Effie Reeves

☐ character
☒ sentence
☐ paragraph

Unweighted Values **Weighted Values**

Overall Unweighted Kappa

| Name | So... | Kappa | Agreement | A and Not B (%) | B and Not A (%) |
|------------------------|-------|-------|-----------|-----------------|-----------------|
| ▶ Ecosystem services | | 1.00 | 100.00 | 0.00 | 0.00 |
| ▶ Renewable energy | | 1.00 | 100.00 | 0.00 | 0.00 |
| ▶ Natural environment | | 0.15 | 86.83 | 12.70 | 12.70 |
| ▶ Environmental change | | 0.00 | 87.15 | 12.87 | 12.87 |
| ▶ Environmental impact | | 0.00 | 98.83 | 1.17 | 1.17 |
| ▶ Habitat | | 0.00 | 98.82 | 1.18 | 0.00 |
| ▶ Land use | | 0.00 | 99.61 | 0.39 | 0.00 |
| ▶ Water | | 0.00 | 96.26 | 3.74 | 2.35 |

Coding Comparison Query Criteria
 Search in: **All Sources** Selected Items Selected Folders or Sets Sources with Classifications
 Coded At: **Selected Nodes** Environmental Imp...ironmental change Calculations based on: ☐ character ☐ sentence ☒ paragraph
 User Group A: Henry Patterson
 User Group B: Effie Reeves
 Unweighted Values Weighted Values
 Overall Unweighted Kappa: 0.06
 They both coded the green
 Henry coded the yellow
 Effie coded the blue
 Coding by: ☒ Both groups ☒ Group A only ☒ Group B only

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